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A REPORT ON THE RESEARCH PROGRAM OF THE PSYCHIATRIC INSTITUTE 1950*

BY NOLAN D. C. LEWIS, M. D.

An adequate program of investigation into the nature and possible causes of mental disorders requires a thorough exploration, utilizing the technics of the basic sciences as well as the approaches usually designated as "clinical research."

The present trends over the country pointing toward the future of research in the psychiatric field are classifiable under the disciplines of biology, biochemistry and biophysics. In the field of biology there are genetics, cellular physiology and pathology (by means of electron and fluorescent microscopy), and morphogenesis. In biochemistry, the enzymes, hormones, proteins, intermediary metabolism, nutrition ("deficiency diseases") and special neurochemical phenomena invite investigation; and in biophysics, radiobiological, cytochemical and electrophysical procedures are becoming increasingly promising.

In clinical research, chemotherapeutical methods utilizing hypnotic drugs, stimulants, vitamins and hormones experimentally, the practice of forms of "psychosurgery," the study of psychodynamics and the determination of the basic differences between reversible and non-reversible lesions and processes in psychosomatic medicine, may afford some of the most-needed information.

Any student of psychiatry must attempt to understand the fundamental laws pertaining to it before he can master the intrinsic aspects of psychological function. He must try to understand both the normal and the pathological in order to evaluate the signs and symptoms, interpret the disease process and arrive at a diagnosis which indicates the treatment. Much of what is still obscure has to be approached by ceaseless experimentation by means of reliable and standard methods of study, and it is with this attitude that the workers of the New York State Psychiatric Institute attack as many of these problems as time and facilities allow.

*Read at the bimonthly conference of the New York State Department of Mental Hygiene, December 14, 1950, at Creedmoor State Hospital, Queens Village, N. Y.

Biochemistry

Brain perfusion technic. In the 1947 report to this conference, considerable emphasis was placed on the Geiger-Magnes brain perfusion technique. It will be recalled that Dr. Alexander Geiger and Dr. Jonathan Magnes of the Hebrew University of Jerusalem came to the institute in the spring of that year and, mainly under the sponsorship of the department of biochemistry, directed by Dr. Warren Sperry, undertook the formidable task of setting up their procedure and starting experimental work with it. In that report the hope was expressed that members of our staff might learn this valuable technic and be able to carry on research with it after Dr. Geiger and Dr. Magnes had resumed their duties in Israel. That hope has now been realized. Dr. Reginald Taylor worked with Dr. Geiger and Dr. Magnes during most of the time they were here, and he has proved thoroughly competent to continue the perfusion experiments. Early in the year Dr. Herbert Meltzer, a competent biochemist with excellent training and experience in isotope-labeling technics, joined the team. Financial support for the project was obtained in the form of a substantial grant ($15,000 per year for three years) from the United States Public Health Service.

Until his departure in May 1950, Dr. Geiger, with the collaboration of Dr. Taylor and Dr. Meltzer, continued investigations with the perfusion technic. These studies, carried out during late 1947, 1948, 1949, and the first part of 1950, have revealed a good deal of information concerning brain metabolism and function. Some of the findings have been described in previous reports, and several papers concerning this work are being prepared for publication. Some of the principal results, obtained or studied further this year, may be summarized as follows.

a. When the brain is perfused with a suspension of exhaustively washed red blood cells in a solution which contains nothing but albumin, glucose, and electrolytes, it gradually loses its permeability to glucose. The permeability can be restored for a short time by the addition of freshly prepared liver extract.

b. When the brain is perfused with simplified "blood" (see a) the metabolic rate is considerably higher, sometimes as much as three-fold, than it is when normal blood is used. The oxidative rate may be so elevated that it is not increased further by metra-

zol, in contrast to the marked increase in oxygen uptake which metrazol always induces in a brain perfused with normal blood.

c. During convulsions, induced by metrazol, the brain does not take up glucose from the perfusing "blood," but regains its permeability when the convulsions are finished.

d. By studies of electrical activity, evidence was obtained, indicating that curare has a direct central action in inhibiting transmission of nervous excitation. It is widely believed that any action of curare on the central nervous system is an indirect effect caused by a reduction in oxygen supply to the brain as the result of peripheral inhibition of respiratory muscles. This cannot be the explanation of the findings in these experiments because the oxygen supply to the brain was controlled.

Since the activation of the United States Public Health Service grant on September 1, preparations for continuation of the investigation, as the Psychiatric Institute's own project, have been under way. Some of the essential parts of the intricate apparatus were the property of Dr. Geiger and had to be replaced. Experimentation could not be resumed until this apparatus had either been purchased or constructed. During this delay Dr. Meltzer has been working on the synthesis of compounds, labeled with radioactive carbon, to be used in the study. Octanoic acid and other fatty acids will be studied first. Metabolic derivatives of the fatty acids, particularly acetoacetic acid, which was discussed in the report last year, will also be investigated.

As was pointed out in previous reports, a wide variety of problems can be studied by means of the Geiger-Magnes technic. It is planned to apply this procedure to the investigation of several aspects of the biochemical metabolism and physiology of the brain.

The study of methods for the determination of acetone, acetoacetic acid, and B-hydroxybutyric acid was continued. These methods are needed for use in conjunction with the perfusion technic. Although several improvements in existing methods have been made, and it is now possible to determine the "acetone bodies" with considerable accuracy in solutions of the pure compounds, it has been impossible as yet to apply the method to the determination in blood. Considerable losses occur during deproteinization and desaccharification.

Serum Lipids. The study of serum lipids in relation to mental disease was continued. Records are available of over 5,000 deter-

minations of the serum cholesterol fractions in patients of the institute. Lipid phosphorus was also determined in a large number of these mentally diseased persons. The large task of correlating these data with the mental and physical status of the patients has been started. The writer is collecting the mental and physical data.

The investigation of the effect of age on the cholesterol concentration of the blood serum was completed, and a paper describing the results was published. The data obtained were in general agreement with the finding of other investigators that there is an average increase with age, but the absence of a significant change over a period of about 14 years in several of the subjects indicates that an increase in the concentration of cholesterol in the blood serum is not an obligatory concomitant of the aging process. There is considerable interest in this subject because of its relation to the problem of atherosclerosis.

Much of the work on lipid metabolism, carried out in the department of biochemistry, has been made possible by the availability of the Schoenheimer-Sperry method for cholesterol determination, which in general has given excellent results. Some trouble has been experienced, however, with one important step of the procedure, precipitation with digitonin. Therefore, in the investigation of the effect of aging, large enough quantities of serum were extracted to permit a thorough study of the precipitation technic. As a result, the method was improved by a change in the digitonin solution. A paper, in which the revised method was described, was published.

Pharmacology

In this department Dr. Heinrich Waelsch and his group have continued their studies of amino acid metabolism in relation to the nervous system along three main lines: (a) metabolism of glutamic acid and glutamine; (b) metabolism of phenlyalanine and other amino acids; and (c) development of antimetabolites against amino acids with the goal of finding effective drugs influencing amino acids and protein metabolism.

1. *Observations of the effect of glutamic acid salts in mental deficiency.* After the conclusion of the study with Dr. Paul Hoch and Miss Kathryn E. Albert on the effect of glutamic acid in mental defectives, in which the significance of the glutamic acid effect

was demonstrated, it was decided to study the effect of the administration of potassium glutamate in a small group of mental defectives. Children were selected who had responded previously to the administration of glutamic acid with a significant improvement in mental performance. When potassium glutamate was administered to those children, no change in mental performance was found. This finding is of major interest since it demonstrates the importance of the ionic environment for the utilization and effect of glutamic acid. It may be mentioned that similar negative results were obtained by other investigators who administered sodium glutamate to mental defectives.

2. *Metabolism of glutamine.* As reported previously it was found in this laboratory that glutamine—the amide of glutamic acid—can penetrate into the brain and into the liver while the amino acid, glutamic acid, is not taken up by these organs. The finding that glutamine can penetrate the blood-brain barrier concentrated the attention on the role of the ubiquitously occurring amides, glutamine and asparagine. Glutamine occurs in large concentrations in all mammalian organs particularly in brain and it has been assumed for a long time, without experimental basis that this amide may play an essential role in amino acid metabolism not only in animals but also in micro-organisms and plants. This assumption found its first experimental support by the discovery in this laboratory of an enzyme system in micro-organisms which catalyze the exchange of the amide group with other amines. It was suggested that this enzyme system may catalyze the trigger reaction which initiates peptide and protein synthesis. This concept and the experiments on which it is based have been reported at several meetings and published during the last year in numerous papers; it immediately has stimulated in other laboratories in this country and in England intensive research along those lines.

The enzymes occurring in micro-organisms and responsible for this basic function of glutamine in protein and peptide synthesis were studied in detail in regard to their kinetics and their activations and inhibitions by N. Grossowicz and M. Schou. For some time, we were not successful in demonstrating the exchange reaction with hydroxylamine or other amines as substrates in mammalian tissues. Finally, it was found by Schou and A. L. Lajtha that the enzyme system responsible for the exchange reaction oc-

curs in all mammalian tissues so far studied but needs manganese and phosphate for its activity. This observation made it possible to study the enzyme system in different tissues. It has been found up to now in brain, liver, kidney and in tumors.

A particularly potent source of the enzyme system is brain cortex. It is of particular interest that an enzyme system closely connected with protein metabolism in brain cortex is activated by manganese, and plans are being developed to study the content of this trace metal in the brain in different diseases of the nervous system. The discovery of the enzyme system in tumors promises to add another line of approach to the study of the metabolism of neoplastic tissue.

In line with the studies previously pursued in this laboratory, an attempt is being made by Dr. E. Borek to develop drugs which would interfere with the enzyme responsible for the utilization of glutamine in the exchange reaction. These studies have not advanced far, but it is already possible to say that such drugs can be made. Further investigations will show whether these compounds may be utilized for the correction of abnormal amino acid and protein metalobism in the central nervous system.

3. *Metabolism of phenylalanine in micro-organisms.* The study of phenylalanine metabolism in micro-organisms has been continued by Dr. Borek and the dependence of its synthesis, as well as the synthesis of other amino acids, upon carbon dioxide tension and temperature has been explored in detail.

4. *Oligophrenia phenylpyruvica.* Microbiological methods for the determination of phenylalanine and its metabolic derivatives have been developed from the studies of the metabolism of the amino acids in micro-organisms. These methods, which are now utilized in our and other laboratories, were applied to a study of the metabolism of phenylalanine in oligophrenia phenylpyruvica. The main results of this investigation, which have been presented at meetings and have been published in several papers, may be summarized as follows. The level of phenylalanine in blood plasma of individuals with phenylketonuria is 20 to 30 times higher than in normals. No increased amounts of phenyl lactic acid or D-phenylalanine could be detected. The increase in the phenylalanine blood level, while caused by the inability of the organism to metabolize phenylalanine, is in its quantitative aspects determined by the kidney. The ability of the kidney tubuli to re-absorb

phenylalanine determines the level of the phenylalanine found in blood. The data of phenylalanine concentration in blood of persons with phenylketonuria give for the first time a measure of the ability of the kidney tubuli to re-absorb any amino acid.

No correlation exists between degree of mental deficiency and the blood level of phenylalanine. Such a correlation, which has been previously assumed by others, is unlikely if one considers that the quantitative aspects of the blood concentration of phenylalanine are determined by the kidney threshold and are not intrinsically connected with the faulty metabolism itself. These findings made it appear possible that in other types of mental deficiency increased phenylalanine concentration in blood may be found without the excretion of the metabolic products of the amino acid in the urine as in phenylketonuria.

Since oligophrenia phenylpyruvica behaves as an autosomal recessive Mendelian character, it appeared desirable to apply the laboratory methods to the determination of the plasma level of phenylalanine in the blood of the heterozygotes, the parents of the mental defectives. With the co-operation of Dr. H. Storrs and Dr. G. Jervis from Letchworth Village the blood of 20 parents of mental defectives of the phenylketonuric type was analyzed. In all of the samples, normal phenylalanine concentrations were found.

The research activities of the department were supported, as in previous years, by grants from the Rockefeller Foundation, the National Vitamin Foundation, the Supreme Council 33d Degree Scottish Rite Masons of the Northern Jurisdiction, and the United States Public Health Service. The extensive research program of the department was made possible to a large extent by the number of fellows who chose the department for their research activities; Dr. N. Grossowicz is a fellow of the National Vitamin Foundation, Dr. M. Schou is a fellow of the United States Institutes of Mental Health, Dr. E. Borek is a fellow of the John Simon Guggenheim Memorial Foundation, and Mrs. B. Prescott and Mr. A. Miller are fellows of the Atomic Energy Commission.

Internal Medicine

Carbonic anhydrase determination. The enzyme, carbonic anhydrase, plays an important role in the handling of carbon dioxide in the animal organism. Various methods for the quantitative de-

termination of this enzyme were investigated. The use of the Warburg apparatus for the quantitative determination of this enzyme at different temperatures, as recommended by different investigators, was found to be unsatisfactory. The method which depends upon the action of this enzyme in converting carbon dioxide into carbonic acid was finally adopted and has been used in the quantitative determination of the enzyme in nervous tissue and blood.

Dr. Meyer M. Harris, director of the department, with the cooperation of Dr. L. Roizin of the pathology department, has been obtaining, from topectomy operations, specimens of brain tissue which are received for histological study; and quantitative determinations of the enzyme in the gray and the white matter of these specimens are being carried out.

A very sensitive quantitative colorimetric method for the determination of small quantities of blood has also been adapted for determining the extent of blood contamination of the tissue. By determining the amount of carbonic anhydrase in the blood of the patient at the time of operation, proper corrections for errors caused by blood contamination have been made possible.

A study is also being made of the nervous tissue of animals with experimental encephalomyelitis from the department of neuropathology. The effect of temperature and various salts on the activity of the enzyme are also under investigation.

Experimental uropepsin studies have indicated that pepsinogen from the gastric mucosa is secreted into the blood stream and excreted into the urine as uropepsin. It has also been claimed that in gastroduodenal ulcer and in certain psychiatric conditions there is an increased excretion of this enzyme in the urine. In view of these claims, the quantitative determination of this enzyme is being carried out in a variety of mental patients under standard conditions of rest in bed and in the postabsorptive state. It is planned to determine whether any correlation exists between the mental status and the rate of excretion of uropepsin.

Studies regarding various activities of the vegetative nervous system are under investigation.

Diuresis Studies. Because of the role of the supra-optic nuclei of the hypothalamus and of the posterior pituitary in regulating water and salt excretion, a study is being made of the pattern of water and salt excretion under standard postabsorptive conditions in a variety of mental conditions. Some patients have been found

to have a very erratic pattern of water excretion. The findings would seem to indicate that the neurovegetative regulatory system in these patients may not adjust smoothly to the needs of the organism.

As a further extension of this study, *in vitro* biological methods have been set up whereby it will be possible to determine as little as 0.005 to 0.01 units of pitocin (aqueous solution of oxytocin obtained from posterior lobe of pituitary gland) in one cubic mililiter of serum. It is planned to apply this method also to other clinical problems and thereby possibly obtain some information of the activity of the neuroposterior pituitary system.

Studies have been continued on the determination of adrenalin in the blood by biological methods. Preliminary studies have been started using the rat meso-appendix technic for the determination of substances in the blood which excite or depress the activity of the arterioles.

Therapy with desoxycorticosterone and ascorbic acid. In view of the report of the favorable effect of the intravenous administration of ascorbic acid plus the intramuscular injection of DOCA, the effect of this therapy was studied in co-operation with Dr. William A. Horwitz in a small group of mental patients. No significant therapeutic effects have been obtained thus far. Some of these patients subsequently improved under insulin or electric shock treatment. It is planned to continue the study in an additional group of patients before expressing a final opinion regarding this form of therapy.

Bacteriology

Section of Corpus Callosum. The investigation has been completed on the effect of extensive or total section of the corpus callosum in monkeys prior, as well as subsequent, to the development of convulsive seizures experimentally induced by the application of alumina cream to the motor cortex of one side of the brain. It was concluded that section of the corpus callosum, either before or after the application of alumina cream to a single motor cortex, caused complete restriction of subsequent convulsive seizures to the contralateral side of the body. The resulting unilateral attacks were severer and more easily elicited than those observed in a large control series of "epileptic" monkeys with the corpus callosum intact. Section of the corpus callosum after bilateral seiz-

ures had been established caused contralateral *status epilepticus* in three of four monkeys, while section of the corpus callosum prior to the application of alumina cream to one cortex resulted in easily elicited contralateral seizures but not in *status epilepticus*. Section of the corpus callosum did not completely inhibit the spread of abnormal electrical impulses to the side opposite the focus. This study appeared recently in the *Archives of Neurology and Psychiatry*.

Ablation of Cortical Areas. The experiments on the effect of ablation of various cortical areas in the monkey, before and after the application of alumina cream, were reported recently in the *Journal of Neurosurgery*. It was shown that subtotal ablation of the precentral motor cortex on one or both sides did not inhibit the subsequent development of recurrent convulsive seizures or EEG abnormalities following the application of alumina cream to an ablated site or to the adjacent cortex. In monkeys with well-established seizures the ablation of cortical tissue underlying the alumina cream disc and including portions of adjacent cortex, caused only a temportary diminution of EEG abnormality and suppression of clinical seizures for seven months and one year respectively. Nevertheless, in the former, seizures recurred for 13 months thereafter.

At the present time the study of the influence of ablation of cortical areas contralateral to the side of the brain to which alumina cream has been applied is being completed. There appears to be a marked increase in convulsive reactivity in the absence of contralateral cortex.

In addition to the application of alumina cream to the precentral motor area, various attempts have been made during the past few years to produce epileptic manifestations by treatment of the temporal tip. Recently some very interesting positive findings have developed clinically and electro-encephalographically.

Several experiments are being conducted on the influence of DFP and My-B-Den (A_5MP) on the course of experimental epilepsy in the monkey. In these experiments Drs. B. L. Pacella, Margaret Kennard and Joseph C. Chusid have collaborated with Dr. Kopeloff. The study is being continued on the delayed local chronic inflammatory reaction at a second antigen depot in the guinea pig. This allergic manifestation has been reported in the

Journal of Immunology, and the observations have been extended to include a second positive focus in the knee joint.

The investigation of experimental allergic encephalomyelitis produced by brain emulsions in the guinea pig is being continued.

Neuropathology

Experimental Allergic Encephalomyelitis. Dr. A. Ferraro and staff have been continuing the original investigations in production and prevention of experimental allergic encephalomyelitis in guinea pigs.

In the production of the encephalomyelitis, the investigations have confirmed the claims of Bell, Habel and associates that it is the factor "X," extracted through calcium acetate from the protein fraction of the brain, which acts as the antigen responsible for the allergic encephalomyelitis.

In the experiment for prevention of the disease it was found that intramuscular injection of the total brain preparation establishes a certain amount of protection against the factor "X." Out of 15 animals unprotected, only one remained healthy while of 15 protected animals, five remained healthy. Further studies are in course to improve the protective power of the brain emulsion following extraction from the protective brain of the pathogenic antigen "X" responsible for the disease.

Pathology in Schizophrenia. Years of evaluation of the pathologic changes in cases of schizophrenia have led Dr. Ferraro to the conclusion that it is necessary not only to describe, but also to evaluate, the pathology in all cases of mental disease particularly of schizophrenia. Such pathology should be described not only along the lines of intraneural pathology, but also along those of extraneural pathology.

The study of pathological changes in important organs of the neuroendocrine system (peripheral and central) will be of great value in clarifying, or speculating on, the importance of vegetative and endocrine relationship as well as the relationship of the autonomic nervous system to functional and structural changes of the brain.

Evaluation of Pathologic Changes in the Brain. Dr. Ferraro advises that before reaching any conclusion as to the causal relationship between structural pathologic brain changes and clinical symptoms in schizophrenia one should evaluate the changes in the light of the three following possibilities:

1. The possibility that structural pathology found in the brain of schizophrenics is the result of complicating intercurrent diseases which may take place in the course of the patient's life. In this case the pathology represents an element of complication and not a causative one.

2. The possibility that occasionally an organic brain disease, be it inflammatory, degenerative, neoplastic or demyelinating, may precipitate the onset of conflictual psychological situations, for which the personality of the patient and the environment are primarily responsible.

The occasional organic pathology would therefore merely represent a trigger, added to other precipitating factors including the one of constitutional predisposition. The clinical coloring of the mental reactions following this occasional organic pathology of the brain will, therefore, depend on the constitutional as well as on the life-long history of the patient. No direct causal relationship could be established between such pathology and the clinical manifestations.

Only when a definite type of structural pathology is almost always associated with a definite type of mental reaction will the causal relationship of the pathology to the clinical syndrome be accepted.

3. The possibility that the structural cerebral damage is the expression of the close interrelationship, i. e., integration of psyche and soma.

Such a psychosomatic approach in the evaluation of the cerebral pathology is based on the recently-emphasized concept that functional disturbances may lead to structural damage.

It is possible that continuous functional vascular imbalance, associated with emotional tensions in various types of conflicts, might gradually lead to structural changes of the blood vessels and structural changes of the surrounding cerebral parenchyma (as in the case of gastric ulcer).

The finding of a diffuse, even though very moderate, structural pathology should be evaluated in the light of such psychosomatic integration. It follows that such a pathology should not be construed as a cause of the clinical manifestations of schizophrenia but rather as the consequence of the functional vascular changes. Such a minute pathology could be part and parcel of the whole psycho-physiological mechanism, which is put in motion in the

course of psychological conflicts and should not be considered as the cause of the conflict.

The evaluation of the pathologic findings in schizophrenia as suggested by Dr. Ferraro would help to avoid the pitfalls of the two extreme points of view, i. e., that structural pathology is not compatible with the diagnosis of schizophrenia or that schizophrenia is an organic brain disease.

Histochemical Studies on Material from Brain Biopsies from Patients Undergoing Topectomies. Comparative relationship between Nissl bodies and iron components and some of the respiratory enzymes (particularly indophenol oxidase, peroxidase) and acid phosphatases was investigated in selected serial sections. The following observations were made:

(a) Morphologic variability of the medium and large pyramidal cells is associated with marked variability in activity of oxidase (Cytochrome-C Oxidase), peroxidase and the acid phosphatases. Generally the oxidase and peroxidase reactions follow very closely the morphologic aspects and distribution of Nissl bodies. The acid phosphatases frequently appeared more concentrated in the areas of more pronounced chromatolysis.

(b) There is apparent close similarity between peroxidase activity of the nerve cells and some components of the fluid and corpuscular elements of the blood vessels.

(c) Concomitant variations in the morphology and enzyme activity of the neurons and glia elements were involved in pseudoneuronophagia and neuronophagia.

Medical Genetics

With the aid of several new research grants provided by the United States Public Health Service, the National Research Council and the Scottish Rite Committee on Dementia Præcox, satisfactory progress has been made in the various long-term twin-research projects conducted by the medical genetics department. The scope of the departmental research activities is indicated by the present total of close to 5,300 twin index units kept under observation for the procurement of comparative longitudinal life records.

During the current year, comprehensive reports on the diagnostic, social and genetic aspects of schizophrenic, manic-depressive and involutional psychoses, as observed in over 1,200 psychotic

twin family units, were completed for presentation at the annual meeting of the American Association for the Advancement of Science in New York, at the International Psychiatric Congress in Paris, and at the recent symposium on "The Biological Aspects of Mental Health and Disease," held by the Milbank Memorial Fund in New York. Since Dr. Franz J. Kallmann was unable to attend the Paris Congress personally, his opening address was read by Dr. Eliot Slater of London.

Preliminary data on mate selection, marital adjustment and intellectual abilities, as observed in a series of approximately 2,500 aging twin subjects, were presented by Dr. Kallmann at the Christmas meeting of the National Council on Family Relations, at the annual meeting of the American Psychological Association, and at the Golden Jubilee of Genetics held by the American Institute of Biological Science in Columbus, Ohio. The psychometric test results used in this analysis were obtained by Miss Lissy Feingold and submitted by her to the faculty of pure science of Columbia University as a Ph.D. thesis. A program for a round table on psychiatric problems of marriage counseling was arranged by Dr. Kallmann for the Detroit meeting of the American Psychiatric Association.

At present, the emphasis of Dr. Kallmann's work is on an analysis of comparative twin data in relation to male homosexuality and special types of mental deficiency. These data will be presented at the January meeting of the Section of Neurology and Psychiatry of the New York Academy of Medicine and at the International Congress on Mental Deficiency in New York in May 1951.

Psychology

Brain Research Projects. From March 1946 until the end of December 1949 the members of the department of research psychology, directed by Dr. Carney Landis, devoted a major portion of their time to the brain research projects. Their findings have been or will be reported in three different books, *Selective Partial Ablation of the Frontal Cortex,* which was published in 1949; *Studies in Psychosurgery,* and *Studies in Topectomy,* both scheduled for publication in 1951.

In a broad and general way the psychological investigation of patients studied before and after psychosurgery indicated that, so long as the agranular motor cortex was not involved, it made very

little or no difference what sort of surgical technic was employed, what portion or amount of frontal lobe tissue was involved by operation, what the diagnosis, age, or sex of the patient might be. The score on every test or indicator used by the psychologist was altered in one or more patients after operation, but no test or indicator score was altered in every patient. There was no regularity of relationship between structure involved and functional alterations. The alterations were usually transient, being shown during the first month or so after operation and disappearing by a half-year.

No evidence was found of any permanent loss in intelligence, learning ability, memory, ability to generalize or abstract, or in creative ability as indicated by any of the psychological test procedures, if the agranular motor cortex was not involved.

Obviously the most striking change produced by operation is the loss in morbid affect or anguish. Our psychologists hold that this loss or reduction in anguish is the basic factor involved in the recovery which follows psychosurgery. They believe the central research problem in psychosurgery is the selection by appropriate methods of patients who are experiencing anguish of the sort psychosurgery will ameliorate. To this end studies of pre-operative status of the patients who have undergone psychosurgery are now being conducted to determine whether the pre-operative test scores are prognostic of outcome. It is interesting to note that tests which seem prognostic are equally so for either operated or unoperated cases, which would indicate that the operation is ancillary to improvement.

The follow-up reports of patients who recovered from psychosis following psychosurgery indicate that it would be most advantageous to follow even more closely than in the past, the lives of persons who have recovered from psychosis, either following psychosurgery, shock therapy, or spontaneously, so that guidance and counsel given in the follow-up and mental hygiene clinics could be increased in effectiveness.

The experience which our psychologists gained with the application of the wide variety of tests which they used during the brain research projects convinced them of the necessity for the better standardization of their methods by repeated applications of the tests with normal persons as well as the necessity of working out new and more appropriate methods for use in studying

mental hospital patients. Following the lead started 80 years ago by Kraepelin, they have been applying a variety of tests to normal and abnormal populations when these persons have been given agents such as phenobarbital, dexedrine and thonzylamine. They have found that certain of the simpler tests do give test scores which differ at a statistically significant level when phenobarbital or dexedrine are used in contrast to scores given by the same persons after they receive placebos. Interestingly enough the tests which were altered were those of simple sensation, perception or psychomotor response, all of which have a long history of experimentation. This lead is now being actively pursued.

Research Psychiatry

Psychosurgery. The department of research psychiatry is participating in the Brain Research Projects. Mainly patients from Psychiatric Institute and Rockland State Hospital are operated upon. A few other patients came from other state hospitals. Topectomy was used as the chosen operation, which was executed on different parts of the frontal lobe. Based on these investigations it is apparent there is no difference in outcome in patients who received topectomy on the lower part of the frontal lobe against the upper part of the frontal lobe. More patients, however, developed epilepsy after operations which were done on the superior part of the frontal lobe. The operations were performed by Dr. Lawrence Pool and his staff. The psychiatric evaluations were done by Dr. Paul Hoch in collaboration with Drs. J. P. Cattell and H. H. Pennes.

Selected patients from the Psychiatric Institute underwent the transorbital form of lobotomy. This operation should be satisfactory from a psychiatric point of view, because personality damage is not produced and epilepsy does not occur. In our hands, however, the operation is not as successful as claimed by others. A number of patients operated upon, who showed initial improvement, relapsed rather quickly but benefited by more extensive operations. This research project was carried out by Dr. Hoch in collaboration with Dr. Lathar Kalinowsky.

Experiments were executed on monkeys to try to block certain areas of the frontal lobe. This blocking of pathways will now be tried on humans. This research project is being carried out by Dr. Hoch in collaboration with Dr. Reginald Taylor, Dr. Waelsch and Dr. Pennes.

Lobotomy for Intractable Pain. Research investigations on patients suffering from intractable pain were continued. These patients undergo unilateral or bilateral prefrontal lobotomy, the surgery being done by Dr. John Scarff of the Neurological Institute. Besides the practical problems of eliminating pain, these operations have theoretical significance. Some of the mechanisms of detaching a patient from his pain experience are very similar to observations made on mental patients "detaching" them from their mental symptomatology. The question of brain damage caused by lobotomy can also be studied in these patients and the impairment of function after operation compared with impairment seen in mental patients. As the patients who undergo operations for intractable pain do not suffer from mental disease, the damaging effect from an operation can be seen in a much clearer way than in patients in which mental symptomatology is present. Furthermore, the extent of damage sustained due to a unilateral lobotomy can be compared with bilateral lobotomy effects. The psychiatric work on this project is being carried out by Dr. Hoch in collaboration with Dr. Kalinowsky, Dr. Cattell and Dr. Pennes.

In the framework of the brain research project psychodynamic studies continue on operated patients. The associations, thinking processes, dreams, and emotional responses to therapists and environment are studied. This study is being continued by Dr. Cattell in collaboration with Dr. Sandor Rado.

ACTH in Schizophrenia. Under the supervision of Dr. Hoch, Dr. G. H. Glaser continued with the investigation of the effects of ACTH in the treatment of schizophrenia. Psychotic states were also observed in patients who received ACTH for rheumatoid arthritis or other chronic disorders. The effect of ACTH on brain metabolism is also being studied in collaboration with the departments of biochemistry and neuropathology.

Investigations of the effects of different drugs such as mescaline, pervitin, lysurgic acid, and sodium amytal continued. These drugs produced mental states in volunteers that were compared with mental states seen in schizophrenia. The results of this research will be published soon; they indicate that schizophrenic and latent schizophrenic individuals respond with a much more severe disorganization to these drugs than normal individuals do, showing their great sensitivity to stress. This research project was car-

ried out by Dr. Hoch in collaboration with Drs. Pennes, Cattell, Glaser and E. L. Demuth.

Investigations on the Efficacy of Glutamic Acid on Mentally-Defective Children. Patients suffering from primary and secondary forms of mental deficiency were treated with glutamic acid alternately with placebos. The results of this investigation will soon be ready. The psychiatric investigations on these patients were carried out by Dr. Hoch. The biochemical part is conducted by Dr. Waelsch.

In conjunction with the department of internal medicine, Dr. Horwitz has used a combination of Doca with ascorbic acid. According to English reports this treatment, which has proved successful in rheumatoid arthritis, has also been used in the treatment of mental disorders. According to some reports an immediate improvement in the patient's mental condition was sometimes seen with the 5 to 10 mg. of Doca given intramuscularly, followed in five minutes with ascorbic acid given intravenously. A few schizophrenic and involutional patients were treated in this way. Aside from a slight shift in subjective symptomatology, no major changes were seen immediately or in the long run. Whatever improvement there was could have been due to suggestive effects. It appears that this form of treatment will not be efficacious, but Dr. Harris and Dr. Hoch are planning to treat a further series of patients before issuing a negative report.

Cortisone During Insulin Therapy. In the past two months in conjunction with Dr. Harry Seneca of Presbyterian Hospital, cortisone has been given to patients while receiving insulin shock therapy. The basis for this work is a finding by Dr. Seneca and collaborators that insulin, in conjunction with cortisone given in rheumatoid arthritis, seemed to have a symbiotic effect. It seemed that when insulin was given, a smaller dose of cortisone could produce the same anti-rheumatic effect. For this reason cortisone was given to patients in insulin coma to see if smaller doses of insulin could be used in the same patient and to see if there were any therapeutic effects from the combination. So far, five patients have been treated. This study has been limited by the difficulty in obtaining cortisone, which was afforded for experimental purposes by the Merck Company. The results are still inconclusive. In two patients, it seemed that smaller doses of insulin could be used

but this effect changed afterward. In one patient, a definite clinical improvement resulted following cortisone, but, again, this was inconclusive and not sustained.

Avoidance of Complications in Electric Shock. During the past year the effort has been continued to avoid complications with electric shock therapy. The glissando technic which was introduced here one and one-half years ago, seems to be standardized and working satisfactorily. However, a certain number of fractures still occur. Curare-acting drugs like tubo-curarine, although safe in the vast majority of cases, occasionally result in fatalities, according to reports. In the past couple of years, more fatalities have been reported. Since the summer of 1950, we have used metubine iodide, which seems to be a safer drug. Twenty-one patients were treated with no complications. The respiratory depressant effect of tubo-curarine seems hardly to be in evidence when metubine iodide is used. Only one case showed some respiratory embarrassment and that was not serious. We have also used metubine iodide in a few patients during insulin coma where combined electric shock and insulin coma have been employed. Patients in insulin coma seem to tolerate metubine iodide well. From the work done to date—which is being continued—it seems that this form of curare (metubine iodide) will replace tubo-curarine and add to the safety of shock therapy whenever a curare-acting drug is necessary.

For the past two months the use of Hirschfeld's non-convulsive stimulating therapy has been studied. It is claimed that this is a safer non-convulsive treatment, that it is effective in anxiety, phobic states and psychosomatic problems. It has also been used in stimulating respiration in situations where depression of respiration is marked, such as in barbiturate poisoning. The theoretical implication with this treatment is that electrodes placed above each ear allow for a current that passes through the diencephalon, thus stimulating vegetative and affective centers. From the work done so far, this theory is not substantiated. However, certain interesting affective responses result from this type of stimulation. Whether they are due to diencephalic stimulation or the result of a pain-producing stimulus affecting the patient while unconscious, remains to be answered. In one case of severe barbiturate poisoning (suicidal attempt) the apparatus seemed to be

definitely effective in stimulating and controlling respiration, confirming claims of its usefulness as an aid to respiration in cases of such poisoning.

Problem of Anxiety. The problem of anxiety in neurosis, as well as in psychosis, remains a difficult one. We have been using many methods in an effort to cut through the anxiety, in order to permit the patient to be sufficiently relaxed and comfortable to accept psychotherapy. Many of these patients because of acute anxiety syndromes are very difficult to approach psychotherapeutically. In recent months two drugs have been used for this purpose. The first is dramamine, and the second is banthine. Both act as autonomic blocking agents. Dramamine has been used extensively in motion sickness, with considerable success, whereas bathine is a relatively new drug in the treatment of peptic ulcer. A small series of patients with extreme anxiety was exposed to both of these drugs, but when no favorable effect whatever was observed, their use was discontinued.

We have been using another drug called sedamyl (Schenley) in the treatment of severe anxiety states, whether neurotic or psychotic. This drug is not a barbiturate but belongs to the carbamide family. Unlike the bromides and barbiturates, sedamyl does not generate a feeling that more must be taken to obtain an effect. The patient retains full control over mental and physical activity. There is no hangover effect, drowsiness or any other hypnotic effect. A group of about 10 patients have been exposed to this drug and it is found to be rather effective in attenuating the severe anxiety of many of these patients so that psychotherapy can be utilized more successfully with them. Results with sedamyl are very encouraging in treatment of the anxiety syndrome, and further work with this medication is certainly indicated.

Pseudoneurotic Schizophrenia. Clinical investigation of the extremely interesting and important syndrome of pseudoneurotic schizophrenia is being continued with the co-operation of the social service department in the follow-up study of patients so diagnosed while they were in this hospital in order to determine the outcome of this disturbance. This study will be complete in about a year.

We have also been interested in the general nosology of schizophrenia and are making an effort to reclassify this disease in terms of modern thinking and according to recent broader knowledge of

the protean manifestations of the disorder. The old classification of schizophrenia is not helpful clinically and is descriptive of the chronic disturbances rather than of any of the acute or insidious manifestations of the disease.

A study of the use of histamine in the treatment of various psychiatric disturbances has been initiated. This is an effort to check the results reported by the Drs. Sackler in their work with histamine at Creedmoor State Hospital. It is too soon to present an adequate evaluation at this time but the results may be ready to present at the May (1951) meeting of the American Psychiatric Association.

Under the auspices of a liberal grant from the United States Public Health Service, Drs. N. D. C. Lewis and Zygmunt A. Piotrowski and staff are on the second year of a project aimed toward the evaluation of diagnostic and prognostic techniques by follow-up studies on patients who were studied and treated previously at the Psychiatric Institute, after having been discharged some years ago. Some of the findings have been published but the final evaluation cannot be made and reported until the research is finished.

There are several other aspects of the research program that belong in any comprehensive description of the activities, but space and time do not favor a complete account here. We are very grateful for the continued interest and support of the staff of the Mental Hygiene Department and for the excellent co-operation of the several directors of hospitals whose aid we have sought and found from time to time.

N. Y. State Psychiatric Institute
722 West 168 Street
New York 32, N. Y.

A CASE OF REACTIVE DEPRESSION SUFFERING FROM ULCERATIVE COLITIS: SERIAL PSYCHOLOGICAL INVESTIGATION

BY M. MARTIN TUNIS, M. D., AND HERBERT DÖRKEN, JR., Ph.D.

Introduction

The following paper is presented as a demonstration of the practical management of a complex and serious clinical problem. Nitrous oxide treatment and Rorschach studies were used as an adjunct to psychotherapy.

Anamnesis, Medical Findings and Treatment

The patient is a 36-year-old nursing sister, member of a religious order. She was uncommunicative on admission,* and the following anamnesis is reported from previous knowledge of her condition.

Always shy and reticent, with no close friends, her early home life was spent on a farm in the midwest, where she recalls many beatings by her father, as well as a continuously-hostile relationship with her mother. She received no sex education whatever and has deliberately avoided obstetrical nursing experience. For many years now, she has been suspicious of "everybody," especially those in authority, and accounts for this by stating that her early experiences with her father taught her to fear and resent her "superiors." The statement may reflect the "psychotherapeutic education" she has received during the past year. The patient has gradually become exceedingly anxious because of marked guilt feelings associated with her inability to perform her spiritual exercises properly. She explains this as resulting from the fact that she identifies her religious "Superior" with her mother.

Recently, sex impulses, previously well repressed, have been causing her some anxiety and much guilt. During the past two or three years her anxiety and guilt have made her so tense that, periodically, she has been unable to sleep at night even with sedation. This, associated with periodic anorexia and vomiting, has prevented her from working steadily. She has also had several episodes of ulcerative colitis.

Despite psychotherapy this patient became progressively more tense, and finally became so agitated and suicidal that she was admitted to a private sanatorium for treatment. Here she was found

*To Verdun Protestant Hospital, Montreal, P. Q.

so difficult to control that she received frequent ECT. She resisted this therapy so forcibly that it was necessary to administer preparatory intravenous pentothal. After four weeks her condition was so poor that commitment was advised.

Relatives of the patient were never accessible for information.

On admission to Verdun Protestant Hospital, Montreal, the patient expressed ideas of unreality for the first time. She stated that she was really two people and that her present self was not her real self; she felt that her food was being poisoned, etc. The patient associates certain somatic complaints with her tension, urethral and anal spasms, laryngeal spasms, and pruritus, with or without urticaria. These latter symptoms were described as becoming more acute, over many years, with the presence of emotional stress or excitement. Further, the patient was seen to be confused, agitated and depressed, commitment documents describing her as suicidal and paranoid.

The main findings on physical examination, apart from pallor and evidence of recent marked weight loss, were restricted to the nervous system. The right pupil was seen to be larger than the left. Both pupils reacted to light and accommodation. A right-foot drop, with no response to plantar stimulation, on this side only, and increased abdominal reflexes on the contralateral side were detected. She gave a history of anterior poliomyelitis in childhood. The ascending colon was firm, tender, and considered to be "spastic." A marked startle reaction was prominent with the slightest stimulation.

Inquiry as to previous illnesses revealed that the patient had had an appendectomy at the age of 14 and "pleurisy" at the age of 16, presumably contracted while nursing her mother for tuberculosis. A "lump" had been removed from her right breast when she was 18. She had suffered, off and on, since the age of 21 with episodes of generalized pruritus, with or without urticaria. During the past four to five years she had also noted diarrhea (with mucus, blood and pus in the stools) alternating with constipation. For this period, hospital records were available which demonstrated at least three episodes of "ulcerative colitis" substantiated by radiological studies.

The usual laboratory studies, including blood chemistry, hemogram, urine, stool, and chest x-ray, revealed only normal findings.

The patient was then seen in diagnostic conference. Since she

had received an intensive course of ECT and continuous massive sedation for at least one month preceding hospitalization, a specific diagnosis was not possible. However, it was felt that the predominating clinical features were reactive depression, marked anxiety, and episodic panic states in a schizoid personality.

The material presented here was obtained during routine interviews and medical examination. Following the inception of N_2O therapy and the institution of Rorschach studies, a wealth of additional associative material was obtained. Indeed, the patient wrote to the therapist, "I cannot understand why things come back so vividly after gas when I haven't even been thinking about them."

It was decided that a conservative regime should be adopted; that the patient's malnutrition should be corrected, and intensive psychotherapy conducted with the aid of nitrous oxide interviews. Correction of malnutrition was achieved by a high protein, high carbohydrate diet, with Casec milk shakes added. Vitamin supplements included beminal forte with ascorbic acid, one capsule b. i. d., and crude brewer's yeast, zi, b. i. d., beminal injectable, 1 cc. daily intramuscularly, was used during the first week. At the onset of therapy, gavage feedings of these were necessary. However, following the first nitrous oxide treatment, the patient began to eat well spontaneously. The procedure of N_2O therapy has been described by Lehmann and Bos.[1] They discuss its advantages, pointing out that although "facilitating" effects similar to that of barbiturate narcosis[2] are obtained, there is no physiological depression.

Clinical improvement was prompt, and the change effected in the patient's mental status warranted a continuation of this therapeutic regime.

Principal Psychodynamic Features and Psychotherapeutic Orientation

In the interest of brevity the material subsequently obtained from this patient is summarized:

I. *Traumatic Experiences*:

A. The patient recalls sleepwalking, as a child, from her bedroom to the living room where she would awaken to find herself stretched out on the cedar chest. (See in the fol-

lowing, Rorschach response, IV—B—1.) She associates fear of locked doors with sleepwalking.

B. An incident was related which occurred while she was a student nurse. She had been given a verbal order to administer a sedative to a chronic alcoholic who subsequently expired from "oversedation." The patient was held responsible for this. She was then compelled to assist at the postmortem, and recalls with horror, "tagging the body and placing it in the frig," which already contained two other bodies. She frequently dreamed that she was locked in the "frig," struggling to get out. (See IV—C— .)

C. Her baby brother, when a few months old, was taken for an automobile ride by her parents. On their return, the patient ran to the car to greet them. Her mother stepped out of the car and gave her the baby to hold. "It was dead and cold" having apparently died during the car drive

II. *Dreams*:

A. Numerous sex dreams were recalled. (E. g. Many men and women in a big hall having intercourse—the patient refused to identify the people involved.) Masturbatory practices and attendant intensive guilt feelings were revealed. (See VI—B—1.)

B. Subsequently she related a dream in which a woman and her two children, a boy and a girl, were standing on a snow-covered hill. The woman shoved the little girl down the hill saying, "Look what a brave little fighter your brother is, he shoved you down hill." Sibling rivalry is indicated.

C. Many dreams of committing suicide were related.

III. *Attitude*:

A. Secretiveness was discussed. The patient is unable to allow anybody to see her in the act of sewing or reading. This appeared to be related to emotional disturbances at the onset of the menarche. (See X—B—2.)

Before commitment, the patient lived in a stress situation wherein she constantly had to subjugate herself to the will of her

"superiors"—religious and administrative. To adjust satisfactorily to this environment she must tolerate the loss of personal independence and accept the conflicts generated.

Release from this stress situation, although available, would create further problems: (1) She would have feelings of inadequacy and guilt for failure to fulfill her religious vows; (2) There would be inability to adjust to interpersonal relationships without a facilitating security and protection similar to that provided by her religious order—even though her professional training and qualifications as a nurse would readily provide economic security —and (3) such additional burdens would further aggravate an already existing personality instability.

Careful consideration of these adjustment possibilities led to the conclusion that the patient herself had previously attempted the plan which had the most likelihood of becoming feasible—though rejected during her illness in favor of (attempted) suicide —namely, to continue in the role of a nursing sister. The psychotherapeutic approach was thus one of rendering more tolerable to her, the circumstances in which she had lived for more than half a lifetime. Although this implied a return to religious duties and subservience, it was felt that the conflicts generated could be alleviated to the point of acceptability by intensive psychotherapy.

Good transference to the therapist had already been established. The psychotherapy was conducted through four phases, separate only in this presentation:

I. Nitrous oxide treatments were administered three to four times weekly, followed by an hour-long interview. The patient's markedly enhanced productivity accomplished the revelation of many conflict situations and traumatic experiences of her early childhood. Particularly striking, were the associations to her responses throughout the second Rorschach evaluation, conducted early in this phase of treatment. The ventilation and abreaction effected a marked clinical relief of tension and improvement in her health.

II. Following this early phase, the therapist encouraged the patient to discuss specific problems such as masturbatory guilt, sex impulses, relationships with her parents, and adjustment possibilities. These interviews frequently created tension, and continuous reassurance to alleviate guilt and anxiety was often neces-

sary. At times, such extreme tension was induced that an N_2O treatment was needed.

III. Oddly enough, though a nurse, the patient knew little of body mechanisms, such as normal ovarian function and menstruation. Fortunately she was of superior intelligence and thus could be educated to gain at least an intellectual understanding of the implications of some aspects of normal human physiology. This superficial psychotherapeutic education was carried out to encourage her to accept herself and to realize that she, in common with other humans, had certain impulses, desires and needs.

IV. The final phase involved a careful delineation of the problems inherent in rehabilitation to her previous occupation and status. The patient's progress during the one-and-a-half-month psychotherapeutic management is probably best illustrated by the serial psychological evaluation.

Serial Psychological Investigation

The Rorschach test was administered to this patient with a view to obtaining further information to aid in diagnosis and appraisal of the personality resources. Two nitrous oxide treatments had been administered, without interview or probing, prior to the Rorschach examination.

The initial record was obtained following two days without therapy. As this was very meager, a second examination was conducted the next day immediately after nitrous oxide gas treatment, when, it was expected, she would be more productive. It may be seen that the percepts and their underlying associations were particularly revealing, eliciting much psychopathology and suggesting, often symbolically, further conflict-material to be investigated. Note that it was not until this presentation that the patient was able to crystallize and express overtly, through a projective framework, some of her traumatic childhood experiences. It was felt that this combination of treatment and projective techniques dramatically shortened the time required for investigation, while providing material with which to commence and orient the psychotherapy. The third Rorschach record was obtained 40 days after the first psychological examination. In it, the psychotherapeutic progress is evident; and many features, symbolically suggested in the second record, were substantiated by the patient's verbal elaborations of her responses.

The responses to the Rorschach will be presented serially, card by card, with related associations included as they occurred. Significant questions or suggestions raised by the responses will also be mentioned. Following this serial presentation each record will be separately interpreted and the material tabulated and shown graphically. Notation of the responses is as follows: the Roman numerals identify the Rorschach plate; the letters, from which examination (first, A.; second, B.; third, C.) the responses were obtained; and the Arabic numerals enumerate the responses.

Rorschach Responses and Associations

I. A. 1. (12″)* "Bat, wings, 'member one coming in upon me at night—rest doesn't seem to belong."	P	D	F	A
B. 1. "Bat" (oral region elaborately described)—"bottom part does *not* look like anything, it is stretched out, not moving, it looks dead." (Oral trauma? Evasion of lower central D, torso?)	P	D	F	A
C. 1. "A bat flying, it's not disturbing in any way, there shouldn't be any openings there, woke up one night with a bat on my face out west—the tail end upsets me, these cards upset me, make me afraid, I feel both guilt and fear (see VI—B—1). They remind me of sex in some way, the bottom is a penis,	P	D	FM	A
2. the top a vagina."		d	F	At sex

*Time for first administration only. Due to circumstances, it was impossible to keep a record of the reaction times in the second and third examination.

II. A. 1. (71″) "Two people with hands together, caps." (smiles)	p*	W	M	H
B. 1. "Two people with hands together, could be either men or women, they are hunched down, just have their hands together." (Patient then told how she had never distinguished sexually her mother from her father, nor the mother superiors from the priests or the Pope.)	p	W	M	H
C. 1. "Two people with hands together, men, don't know why the card is not upsetting." (Improved sexual identification?)	p	W	M	H
2. "Vagina, central small red part a penis." (Usual location of sexual symbols reversed; in attempt to avoid traumatic menstrual symbol? See X—B—2. Symbols separately located and at a distance, see also, I—C—1.)		d	F	At sex
III. A. (100″) Rejected.				
B. 1. "They could be people trying to get away, pulling away from that thing in the center, they are men (rubs area of torso), the way they are dressed	P	W—**	M	H

*"p"=the "very frequent" responses, referred to by Rapaport and considered here as "additional" popular responses.

**W= "cut-off whole response" as described by Klopfer and Kelley.

	makes me think they are men (becomes exceedingly tense, pronounced oral tremor), they don't seem to be wearing skirts." (Confusion in sexual identification, possible traumatic reaction to genital area?)			
	C. 1. "Two people trying to get away, men because of pant legs, coat tails—pulling away from a vagina."	P	W− M	H, At sex
IV.	A. 1. (50″) "Some kind of animal, legs, body."		W F	A
	B. 1. "This one upsets me, makes me feel afraid. This is the one that's spread out (begins crying), reminds me of the sleepwalking. Like an animal spread out, held and can't pull its legs in or its wings in, I want to go on to the next picture." The patient then described how she often walked in sleep from her bedroom to the living room and would lie on the cedar chest, awakening with a feeling of being lost, not knowing how to go back. Terrified she would lie there trembling till morning. Then she told how her father used to whip and beat her and how she was frequently enuretic. This occurred around eight years of age. This card is often		W Fm←FM	A

viewed as a father figure or figure of authority, which may explain the patient's traumatic reaction to it. (The associations to this response reveal that its symbolic significance is probably overdetermined.)

C. Rejected. (Bursts into tears.) "Reminds me of being stretched out, incident on the cedar chest, it seems so alive or something." (Association to this stimulus was too traumatic to be divulged at this time. Later, it was found to be psychodynamically related to her traumatic autopsy experience and to death wishes toward her father.)

V. A. 1. (15″) "Bat again." P W F A

B. 1. "Bat again, stretched out too, I'm gone on that term stretched out. I think it's dead. I think number four bothers me because it's alive, but this one's dead." (Death wish toward father reflected in card IV probably displaced to card V?) P W F A

C. 1. "Bat again, wings are not the right shape, head or feet at the bottom, it's alive now." P W F, FM A

VI. A. ("Heaving," increased depth of respiration.) (90″) Rejected.

B. "I don't think of anything." (After the test was completed, she told how she recognized "it" as a penis, deformed and misshapen, saying it reminded her of masturbation. Note relation of misshapenness to "masturbation." Guilt feelings over masturbation were corroborated in later psychotherapeutic sessions.)			
C. 1. "Penis at top, vagina at bottom." (Again, a great spatial separation of the sexual organs.)	D	F	At sex
2. (Covering top D with P hand), "Furry animal fur."	W−	cF	A obj
VII. A. (80″) Rejected.			
B. 1. "Like clouds."	W	K	N
2. "Also two women's faces, and the part below is the rest of the women, seem to be held together by something, don't know what it is." (The patient later described how she joined a religious order to leave home and her unbearable parental relations. She felt sexually different from, and inferior to, other women and the garb of the order seemed to equate her to them.)	p W−	Fm←M	H

C. 1. "Clouds."		W	K	N
2. "Or two women, p, O body, bottom part is the buttocks which are together. The penis (upper part of vaginal d) with the vagina at the bottom, so situated that only one vagina visible." (Perceptual distortion evidence of inadequate sexual adjustment?)		W	M—	H, At sex
VIII. A. 1. (27″) "Two mice fastened to something, caught."	P	D	Fm←FM	A
B. 1. "Two mice at the sides, they look as if they are caught, stuck to something, can't make out what the rest is, held down." (Lower central D, disturbing claustrophobic association to this area? Animals caught in vagina?)	P	dr	Fm←FM	A
C. 1. "Two mice trying to get away, away from bottom part, it's a vagina."	P	dr	FM	A, At sex
IX. A. (105″) Rejected.				
B. "Can't see anything in this — I see the colors, neither pleasant nor unpleasant." (Does strong affective, i. e., color stimulus with sexual connotations, cause blocking?)				

	C. 1. "Could be a candle, base of a candlestick holder, it is burning, a faint blue flame, it is a buttocks with a penis in the middle." (Some acceptance of sexuality?)	D	Fsym, FC	obj, At sex
X.	A. 1. "Some fungi or something, perhaps the color." (50″) addit. "crab" P D F A	D	cF, CF	Pl
	B. 1. "Blue parts look like crabs." P	D	F	A
	2. "Pink parts look like fungi or something like that —in earth, on bread, intertwined in earth, light and dark, molding." (Then told how it reminded her of her soiled menstrual rags. At puberty her mother gave her rags and demanded that between periods she must hide them and never inform anyone when her periods occurred. She used to look in terrified fashion for a place to hide these rags with a feeling of terror lest they be found. A significant factor underlying the patient's clinically evident, compulsive seclusiveness?)	D	cf, CF	Pl
	3. "Two animals fastened to a post or something the animals are struggling to get away." (Struggle to escape from the phallus?) p	D	Fm←FM	A

4. "Green part makes me feel like a complete failure 'cause I did this stain in biology and had to give up the course." (On being hospitalized.)	D	C sym	Pl
C. 1. "Crabs, green part is claw."	P, O dr	F	A
2. "Two little animals trying to get away, tied or caught on thing in center—a penis."	p	D	Fm←FM	A
3. "The vagina is down in the center at the bottom." (Popular rabbit head.) (Note again, separation of the organs. The fungi and biology stain responses do not reappear. It is probable that the problems reflected in the associations to these responses have been worked through.)	d	F	At sex

Interpretation

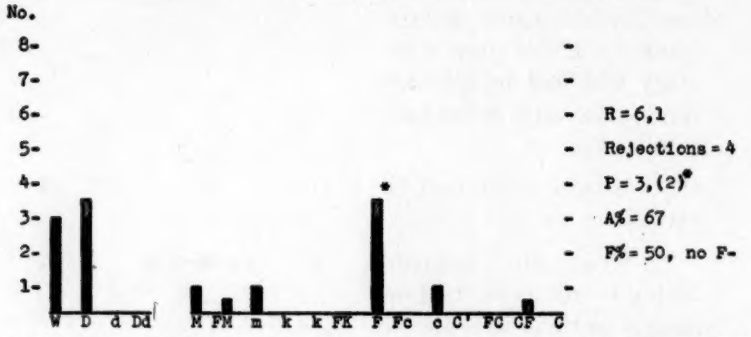
Rorschach Record 1

The patient's physical condition at the time of testing was, as described in the foregoing medical history, poor.

Such constriction and limited range of response in an individual of previously superior ability, as shown in Figure 1, is pointed evidence of the crippling effect of her illness. She guarded her productions so closely that she was scarcely able to form a concept. Blocking was pronounced.

Clinical impressions: The meager production, blocking and prolonged reaction times occur typically in the records of depressed persons. It was felt, however, that response was not merely limited but that associations were also being withheld because of the painful nature of their content.

Figure 1

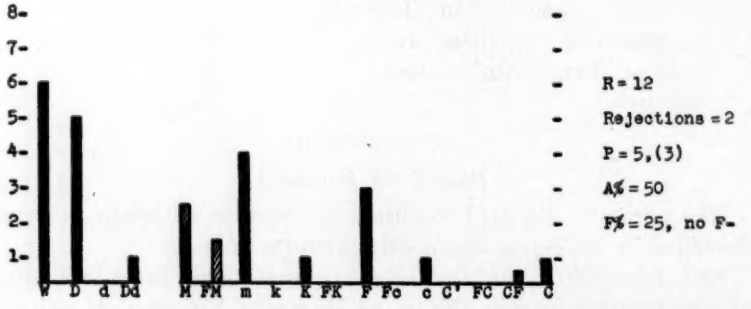


*Additional responses are graphically portrayed by that part of the column which is striped, scale 1 to ½. Additional "populars" (p) are the "very frequent" responses as referred to by Rapaport.

Rorschach Record 2

On reaching consciousness following nitrous oxide therapy, the patient appeared clinically less tense and stated that she felt more relaxed. In this atmosphere, it was felt advisable to have the therapist conduct the Rorschach examination.

Figure 2



Following nitrous oxide therapy and in the presence of the therapist alone, the patient became, as expected, more relaxed, accessible and less guarded, doubling her number of responses in this retest. There was no longer any constriction, stereotypy was diminished and there were only two rejections, thus her defense mechanisms were not being so severely maintained.

The record substantiates the previous clinical impression that much traumatic associative material was being withheld. Particu-

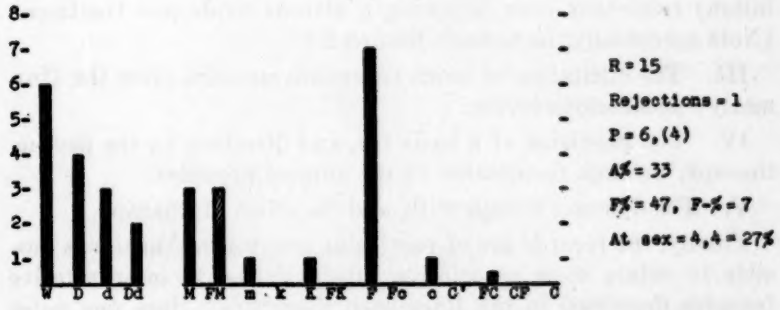
lar indications were the extent of sexual symbolism to the response content and the degree of conflict evident (m). Further, a wealth of associative and elaborative material bearing relation to her psychosexual maladjustment, and ensuing depression with guilt feelings, was uncovered.

The clinical impression was that her especial ability to interpret and describe the underlying meaning of her responses is a type of insight more common to the schizoid personality whose conscious and unconscious levels are in a somewhat fluid state.

Rorschach Record 3

The patient is clinically much improved. She is no longer suicidal, has gained weight, no longer suffers from symptoms of ulcerative colitis, is markedly less tense, and lends assistance to the ward nurses. This Rorschach examination was also conducted by the therapist.

Figure 3



The beneficial effects of intensive analytical therapy are dramatically portrayed in this, a third and much improved record, obtained 40 days after the initial psychological investigation.

There are many signs of concern with personal problems and a preoccupation with sex, caused, not only by the strength of the patient's urges but also by the stage reached in therapy. A host of associative and traumatic material, largely of sexual content, has been activated. It is significant of progress that this individual, formerly so severely blocked, can now verbalize much of her sexual conflicts, projecting them onto the ink blots. The sex in several of the responses is now positively identified, and she is capable of accepting and expressing her instinctual drive to some

extent, as seen in the FM or animal movement responses. Reassuring, too, is the developing stability of her inner adjustment, diminished tension and need for inhibition (ratio of M:FM:m). She is more productive, the range of her response more varied, yet increasing in its "popular" content, thus paving the way for a more constructive life. Her response to affective (color) stimuli is still severely limited.

The clinical impression is that although a considerable amount of material has been worked through and some improvement noted, many problems remain.

Summary of Findings

The authors feel that this series of Rorschach records is particularly enlightening and demonstrates dramatically:

I. The advantages and efficacy of a combined therapeutic approach.

II. The stimulation of the associative flow (release from inhibition) commonly seen following a nitrous oxide gas treatment. (Note specifically, Rorschach Record 2.)

III. The elicitation of much traumatic material from the (formerly) unconscious levels.

IV. The provision of a basis for, and direction to, the psychotherapy, through facilitation of the clinical appraisal.

V. The dynamic change with, and the effect of, therapy.

Finally, the records are of particular interest in that it was possible to obtain some associative substantiation to interpretative features described in the Rorschach literature. Here one notes especially: the relation of deterioration responses and masturbatory guilt, peculiar sexual responses and sexual maladjustment, animal movement (FM) as representative of instinctual drive, Fm denoting conflict. The responses have, indeed, as the theory of projective technique describes, a qualitative meaning far beyond the mere quantitative appearance of objective signs.

Follow-Up

A one-year follow-up indicates that the patient has not only maintained, but furthered her improvement. She has only minimal rectal and anal spasms, these subsiding spontaneously, and she is able to sleep without sedation. To control her ulcerative

colitis, she is still receiving Trasentin, 50 mg., q. i. d., and a low residue diet. Her readjustment and activity level are good; she is proficiently occupied as a nursing sister.

• • •

Thanks are extended to Dr. G. E. Reed, medical superintendent of Verdun Protestant Hospital for his co-operation and permission to publish this study and to Dr. H. Lehmann, clinical director, for his guidance during it.

Verdun Protestant Hospital
Montreal, P. Q.

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SURVEY OF NEUROPSYCHIATRIC ADMISSIONS AND DEPARTURES AT VETERANS ADMINISTRATION HOSPITAL, NORTHPORT, N. Y., FROM JULY 1, 1947 TO JUNE 30, 1948*

Including a One-Year Follow-up

BY LESTER DRUBIN, M. D., AND LOUIS F. VERDEL, M. D.

During the one-year period from July 1, 1947 through June 30, 1948, 492 patients were admitted to the Northport (N. Y.) Veterans Administration Hospital for neuropsychiatric illnesses. All of these patients were followed for at least one year following admission, and their status was evaluated as of June 30, 1949.

Of these 492 admissions, 253 patients have been discharged from the hospital and 63 patients sent out on trial visit. It is important to break down the discharges into types, so as not to be misled or misguided by gross figures or percentages. The 253 included 210 patients who were discharged as actually no longer in need of hospital care. These were discharged as having obtained maximum benefit from hospitalization or from leaves of absence and trial visits. Only two were discharged from absence without leave, and four were discharged from completion of an observation period. Twenty-eight patients were discharged by transfer to other neuropsychiatric hospitals and, although classified as discharges, have not been considered as such in this survey. An additional 15 patients were discharged against medical advice and have also not been included. Thus, a total of 210 patients may be considered as having been discharged as no longer in need of hospital treatment. Only three of these discharged patients have since been readmitted to the Northport hospital for further care and treatment.

On June 30, 1949 there were 63 patients still on trial visit and it was expected that a large number of these would be discharged from trial visit. There have been 14 deaths, and this figure has not been included in the number of patients discharged although contained in the number of patients admitted.

To reduce these figures to percentages, a total of 51.4 per cent of 492 neuropsychiatric patients admitted during a one-year period

*Reviewed in the Veterans Administration and published with the approval of the chief medical director. The statements and conclusions published by the authors are the result of their own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

and followed for a minimum of a one-year period, were discharged from the hospital and 12.8 per cent were on trial visit. The percentage of patients discharged as no longer in need of hospital care or treatment is 42.7 per cent. The latter percentage will undoubtedly increase as many of the patients on trial visit status are discharged from such status. (Table 1.)

Table 1

N. P. patients admitted	492		
First admission		386	
Previous admissions		106	
Patients discharged	253		(51.4%)
No further hospitalization necessary		210	(42.7%)
Discharged by transfer		28	
Discharged against medical advice		15	
Patients on trial visit	63		(12.8%)

A total of 160 patients who were admitted during this one-year period were still in the hospital on June 30, 1949. There were 46 patients on the acute intensive treatment service, 97 were on the continuous treatment service, 14 were on the medical-surgical service, and three were absent without leave. The patients admitted during the year included 425 World War II veterans, 56 World War I veterans, eight peace-time, and three Spanish-American War veterans. (See Table 2.)

Table 2

World War II veterans	425
World War I veterans	56
Peace-time veterans	8
Spanish-American War veterans	3

First admissions to this hospital totaled 386; and 106 patients had previous admissions to this hospital.

The number of patients admitted by transfer from state hospitals or from other neuropsychiatric hospitals totaled 101. There were 238 patients admitted from home or general medical hospitals. The New York Regional Office and Mental Hygiene Clinics sent 97 patients and the army, navy, and United States Public Health Service hospitals sent 56. (See Table 3.)

Table 3

Admitted from home or general medical hospitals	238
Admitted by transfer from state or N. P. hospitals	101
Admitted from N. Y. Regional Office and mental hygiene clinics	97
Admitted from army, navy, U. S. P. H. S. hospitals	56

The number of patients admitted and classified as having schizophrenic psychoses totaled 341, or 69.3 per cent, of the total number of neuropsychiatric admissions. (See Table 4.) Psychoneurotic disorders were diagnosed in 53 patients or 10.8 per cent. (See Table 5.) Character and behavior disorders were found in 25 patients, 5.1 per cent; without psychosis in 18 patients, or 3.7 per cent; and with psychotic reactions in seven patients, or 1.4 per cent. (See Table 6.) Psychoses with organic brain disease were found in 24 patients, 4.9 per cent. (See Table 7.) The effects of alcohol accounted for the admission of a total of 18 patients, 3.7 per cent. Acute alcoholism was the primary diagnosis in five patients, or 1 per cent; chronic alcoholism without psychosis existed in six patients, 1.2 per cent; and chronic alcoholism with psychotic reaction was present in seven patients, 1.4 per cent. (See Table 8.) Affective psychotic disorders occurred in 13 patients, 2.6 per cent. (See Table 9.) Psychoses, unclassified, were found in five patients, 1 per cent. Psychoses due to intoxication were present in four patients, 0.8 per cent (benzedrine, barbiturates, bromides). (See Table 10.)

Mental deficiency with psychotic reaction was present in two patients, 0.4 per cent. Diagnoses were made of paranoid state in one patient, 0.2 per cent; acute situational maladjustment in one patient, 0.2 per cent; and chronic pulmonary tuberculosis with psychotic reaction in one patient, 0.2 per cent. No neuropsychiatric condition was found in one patient, 0.2 per cent; and three patients, 0.6 per cent, remained in the hospital an insufficient length of time for any neuropsychiatric diagnosis to be made. (See Table 11.)

Table 4

Schizophrenic reactions (69.3%)

Paranoid type	175
Hebephrenic type	73
Catatonic type	62
Simple type	13
Unclassified	16
Latent type	2
	341

Table 5

Psychoneurotic disorders (10.8%)

Anxiety reaction	33
Depressive reaction	10
Dissociative reaction	4
Hypochondriacal reaction	2
Obsessive-compulsive reaction	2
Psychogenic gastro-intestinal reaction	1
Psychogenic respiratory reaction	1
	53

Table 6

Character and behavior disorders (5.1%)

Non-psychotic (3.7%)	
Antisocial personality	8
Emotional instability reaction	4
Inadequate personality	3
Sexual deviate	2
Cyclothymic personality	1
	18
With psychosis (1.4%)	
Antisocial personality	4
Emotional instability reaction	3
	7

Table 7

Psychoses with organic brain disease (4.9%)

Cerebral arteriosclerosis	9
Trauma	4
Syphilis of central nervous system (M. E. type)	4
Syphilis of central nervous system (M. V. type)	1
Epilepsy	3
Unknown type	2
Internal hydrocephalus	1
	24

Table 8

Alcoholic disorders (3.6%)

Acute alcoholism	5
Chronic alcoholism without psychosis	6
Chronic alcoholism with psychosis	7
	18

Table 9

Affective disorders (2.6%)

Manic-depressive, depressed type	4
Manic-depressive, manic type	2
Manic-depressive, hypomanic type	1
Manic-depressive, mixed type	1
Psychotic depressive reaction	3
Involutional melancholia	2
	13

Table 10

Psychoses due to intoxication (0.8%)

Bromides	1
Barbiturates	1
Benzedrine	1
Unknown toxic agent	1
	4

Table 11

Other diagnoses (2.9%)

Psychosis, unclassified	5
Undiagnosed	3
Mental deficiency with psychotic reaction	2
Acute situational maladjustment	1
Paranoid state	1
Pulmonary tuberculosis with psychotic reaction	1
Psychosis not found	1
	14

As previously indicated, 341 patients were classified as schizophrenic reactions (175 paranoid, 73 hebephrenic, 62 catatonic, 13 simple, 16 unclassified, and 2 latent). At the time of this survey, 166, or 48.7 per cent, of all schizophrenic patients were at home, either discharged as no longer in need of hospital care, or on trial visit; 113 having been discharged (33.1 per cent) and 53 remaining on trial visit (15.6 per cent). The breakdown into the various types of schizophrenic reaction is presented in Table 12.

Electric shock therapy was given to 98 patients, and 42 of them left the hospital, 42.9 per cent, 26 having been discharged and 16 sent on trial visit. Schizophrenic reactions were present in 93 of these patients, and 38 of these left the hospital, 40.9 per cent, 23 discharged and 15 on trial visit. The 51 paranoid schizophrenics responded, with 21 patients able to leave the hospital, 41.2 per

Table 12
Schizophrenic reactions

	Total number	Discharged		Trial visit		Out of Hospital	
		No.	Per cent	No.	Per cent	No.	Per cent
Paranoid	175	71	40.6	26	14.8	97	55.4
Hebephrenic	73	14	19.1	9	12.3	23	31.4
Catatonic	62	16	25.8	11	17.7	27	43.5
Unclassified	16	4	25.0	3	18.8	7	43.8
Simple	13	7	53.8	4	30.8	11	84.6
Latent	2	1	50.0	0		1	50.0
	341	113	33.1	53	15.6	166	48.7

cent; 13 discharged, 25.5 per cent; and eight on trial visit, 15.7 per cent. The 22 catatonic schizophrenics responded with 12 patients able to leave the hospital, 54.6 per cent; eight discharged, 36.4 per cent; and four on trial visit, 18.2 per cent. The 18 hebephrenic schizophrenics responded with four patients able to leave the hospital, 22.0 per cent; two discharged, 11 per cent; and two on trial visit, 2 per cent. Affective disorders were present in four of the patients treated by electric shock, and two have been discharged; one left on trial visit, and one manic-depressive, depressed, remained in the hospital. (See Table 13.)

Table 13
Electric shock therapy

Diagnosis	Treated	Discharged		Trial visit		Out of Hospital	
		No.	Per cent	No.	Per cent	No.	Per cent
Schizophrenic reactions							
Paranoid	51	13	25.5	8	15.7	21	41.2
Catatonic	22	8	36.4	4	18.2	12	54.6
Hebephrenic	18	2	11.0	2	11.0	4	22.0
Unclassified	2	1		0		1	
Simple	0	0		0		0	
Affective disorders							
Psychotic depressive reaction	1	1		0		1	
Manic-depressive, depressed	1	0		0		0	
Manic-depressive, manic	1	1		0		1	
Inadequate personality	1	1		0		1	
Reactive depression	1	1		0		1	
	98	27		15		42	

Insulin coma therapy was administered to 18 patients, all of whom were schizophrenics. Eleven patients left the hospital, 61.1 per cent, six discharged, five on trial visit, and one discharged against medical advice. The 12 paranoid schizophrenics responded with four discharges, 33.3 per cent, and two trial visits, 16.6 per cent. The five catatonic patients responded with one discharge, 20 per cent, and three trial visits, 60 per cent. (See Table 14.)

Table 14

Insulin shock therapy

	Treated	Discharged		Trial visit		Out of Hospital	
		No.	Per cent	No.	Per cent	No.	Per cent
Schizophrenic reaction							
Paranoid	12	4	33.3	2	16.6	6	39.9
Catatonic	5	1	20.0	3	60.0	4	80.0
Unclassified	1	1	AMA	0		1	
	18	6	33.3	5	27.8	11	61.1

It is interesting to note that of the 225 patients who had no electric or insulin shock treatments during the period of this survey, 82 were discharged, 36.4 per cent, and 32 were sent on trial visit, 14.2 per cent. Of the 116 patients who had electric or insulin shock treatments, 31 were discharged, 26.7 per cent, and 21 were sent on trial visit, 18.1 per cent. (See Table 15.)

Table 15

	No shock treatment		Electric or insulin shock treatment	
	No.	Per cent	No.	Per cent
Total number of patients	225		116	
Patients discharged	82	36.4	31	26.7
Patients on trial visit	32	14.2	21	18.1
Patients out of hospital	114	50.6	52	44.8

It is not believed that these findings are of any significance since the groups are not comparable insofar as type, severity, or duration of illness, age, etc., are concerned. It does, however, indicate that a significant percentage of improvement in schizophrenia occurs by means other than the shock therapies.

Psychosurgery was performed on six patients—one died, one left on trial visit, and four remained in the hospital, two of these having shown some improvement.

Patients who left on trial visit but have returned during this period of study have not been included in the figures cited.

The average total lengths of time between the onset of mental illness in the patients in this series and the dates of admission to this hospital, were 44.8 months for the schizophrenic, 38.7 months for the psychoneurotic, and 53.9 months for the character-behavior disorder groups. (See Table 16.)

Table 16

Duration of mental disorder before admission to Northport

	Average duration of illnesses	Nos. of patients ill less than 1 year		
	Months	Under 1 yr.	Under 6 mos.	Under 1 mo.
Schizophrenic reaction (341 patients)	44.8	81	51	17
Psychoneurotic disorders (53 patients)	38.7	11	7	1
Character-behavior disorders	53.9	4	3	0
Affective disorders	35.0	5	4	0
Alcoholic disorders	50.7	2	2	2
Organic psychoses	101.8	0	0	0
Toxic psychoses	81.0	1	0	0
Unclassified psychoses	60.0	0	0	0
Undiagnosed	8.3	2	2	1
Discharged schizophrenics (113 patients)	41.3	45	26	
Catatonic	15.6	11	8	
Hebephrenic	26.1	6	3	
Paranoid	45.5	23	13	
Simple	79.8	1	0	
Unclassified	13.0	4	2	
Latent	68.0	0	0	
Discharged psychoneurotics	41.2	10	7	
Schizophrenics on trial visit (53 patients)	35.6	11	8	

In the schizophrenic group, comprising 341 patients, 81 had been psychotic less than 12 months; 51 of these were psychotic less than six months, and 17 of these were psychotic less than one month prior to admission to this hospital. In the psychoneurotic group, comprising 53 patients, 11 had been ill less than 12 months, seven less than six months, and one less than one month prior to admission.

The 113 patients classified as schizophrenic and discharged as no longer requiring hospitalization had been ill an average of 41.33 months prior to admission. A total of 45 of these patients had been ill less than one year, and of this number 26 had been ill less than six months prior to admission to the hospital. Those 53 patients who were classified as schizophrenic and sent out on trial visit, had been ill an average of 35.6 months. Eleven of these patients had been ill less than one year, and eight of this number had been ill less than six months.

The patients with psychoneurotic reactions, who were discharged as no longer requiring hospitalization, totaled 49. Ten of these were ill less than 12 months and of this number, seven were ill less than six months.

Follow-up letters were sent in October 1949 to the 210 patients discharged as no longer in need of hospital treatment. Answers which indicated whether these patients had had to be re-admitted subsequently to psychiatric institutions, and whether they were employed, were received from 163, of whom 19 had been re-hospitalized.

Replies from 97 patients who had had schizophrenic reactions, indicated that 12 were re-hospitalized subsequent to discharge; 28 were employed, 12 were students, and 45 were not working. Among the 12 re-hospitalized, two were again able to leave the hospital. In the psychoneurotic group, replies were obtained from 38 patients; 26 were employed; two were students; eight were unemployed and two were re-hospitalized. Of the five other patients who had had to be re-hospitalized, three were suffering from character and behavior disorders, one from chronic alcoholism, and one from manic-depressive psychosis. Table 17 presents the detailed tabulation of the 163 replies.

Nine of the 19 re-hospitalized patients who had been discharged as no longer in need of hospital care had been discharged as having received maximum benefit from hospitalization; eight of the others had been discharged from trial visit and two from AWOL status. The average duration of mental illness at the time of admission to the hospital of these 19 patients was 47.1 months; four had been ill less than one year and three less than six months. Schizophrenia was the diagnosis of 12 of these patients, three of whom were treated by insulin therapy and three by electric shock therapy.

Table 17
163 *questionnaire replies*

	Remaining out	Employed	Student	Re-hospitalized
Schizophrenic reactions	85	29	12	12
Catatonic	13	6	1	2
Hebephrenic	9	3	2	2
Paranoid	55	17	9	5
Simple	4	2	0	2
Unclassified	4	1	0	1
Psychoneurotic disorders	35	25	2	2
Alcoholic disorders	9	6	0	1
Chr. alc. without psychosis	6	4	0	1
Chr. alc. with psych.	2	1	0	0
Acute alc. intox.	1	1	0	0
Affective disorders	5	4	1	1
Manic-depressive	3	2	1	1
Involutional	2	2	0	0
Character-behavior disorders	5	2	0	3
Not psychotic	2	1	0	3
With psychoses	3	1	0	0
Organic psychoses	2	2	0	0
Toxic psychoses	2	1	0	0
Unclassified psychoses	1	1	0	0
Totals	144	70	15	19

The writers have not combined these results with the figures previously presented for several reasons. In the first place, the previous figures are the result of the survey made June 30, 1949, of patients admitted to this hospital between July 1, 1947 and June 30, 1948. The course of the patients who were still in the hospital on June 30, 1949 has not been followed since that time; and it is safe to assume that a number have since been discharged or sent out on trial visit. Second, there were no answers to 47 letters, a matter which would further serve to make any revised figures less accurate than those already noted. In addition, those patients who would be classified as no longer in need of hospital treatment would have been so classified for a very limited period and would further becloud the findings. It is, therefore, felt that no greater accuracy would result from a combination or re-evaluation of the figures already cited; and the incomplete follow-up results are presented merely for the purpose of making available all information which has been obtained.

The figures and results have significance when it is realized that a considerable number of patients admitted during the one-year period, were able to leave the hospital. The significance is heightened when it is further noted that the greater number of these patients were mentally ill for long periods, a great many having been admitted from other hospitals. In addition, 69.3 per cent of the patients admitted had schizophrenic reactions. The more glowing statistics and figures cited for other hospitals frequently give little emphasis to the fact that a large percentage of the patients admitted and discharged consists of psychoneurotics, alcoholics and sufferers from rather recent acute psychoses, all of whom are much more likely to show sufficient improvement for rapid discharge than the more chronic and morbid types of mental illness which are admitted to Northport. In addition, in many institutions the same patients are discharged and re-admitted several times, thus swelling the gross admission-discharge rates.

At Northport, 59 per cent of the psychotic patients discharged have been on trial visit a minimum of 90 days and generally have made satisfactory adjustments on trial visit for one year. The number of patients admitted and discharged could be vastly increased by outright discharge instead of trial visit and then by readmission of such discharged patients who fail to adjust satisfactorily.

It is not felt that the results at Northport are superior to those obtained in other similar institutions. However, the writers do wish to draw attention to the fact that careful and detailed analyses of the very favorable statistics from other hospitals would have to be made before any comparison would be valid. The need for uniform discharge statistics, as has been clearly outlined by Barton, Tompkins and Nadel,* is a real one; and until such uniformity is reached no comparison or satisfactory estimate can be made of the efficacy of treatment in our psychiatric hospitals. At the Veterans Hospital, Northport, during the year of this survey, approximately 82.9 per cent of all admissions were for psychoses; 10.8 per cent of admissions were for psychoneurotic disorders; 3.7 per cent were for non-psychotic character and behavior disorders; 2.2 per cent for non-psychotic alcoholic disorders and 0.4 per cent for other non-psychotic conditions. It should be noted that at the

*Barton, W. E.; Tompkins, H. J.; and Nadel, A. B.: Am. J. Psychiat., 106:6, 429-440, December 1949.

Perry Point and Roanoke Veterans Administration Hospitals, 34 per cent and 40 per cent, respectively, of admissions over a three-month period were for psychotic disorders, while 31 per cent and 35 per cent, respectively, were for alcoholic intoxication and drug addiction and 14 per cent and 13 per cent, respectively, for psychoneurotic disorders. It is obvious that the types of conditions for which patients are hospitalized differ widely in different hospitals and locations. Therefore, discharge rates cannot be compared until proper breakdowns of the diagnoses, duration of illness, type of treatment, social factors, etc., are made for each series of figures presented by each hospital concerned.

In addition, the criteria upon which recommendations are made for discharge or trial visit must be evaluated in each individual hospital. What are the criteria used for designating a patient as being improved or in remission from his mental illness? What criteria are selected for deciding when the patient may be released into the custody of his relatives on trial visit or when he may be given a maximum hospital benefit discharge? How many trial visits and discharges are brought about chiefly as a result of pressure from interested relatives and how many are prevented because of disinterest and inability of relatives to help the patient adjust outside of the hospital even when he has improved sufficiently? Geographical location, and economic and social levels of the surrounding areas to which patients can be sent are also considerations which must be evaluated. None of these factors are constant and proper allowances must be made before there can be any fair basis for comparison.

The findings at the Veterans Administration Hospital, Northport, do demonstrate that a very appreciable and significant number of patients admitted between July 1, 1947 and June 30, 1948, for the more serious and chronic types of mental illness, were able to be discharged or sent on trial visit from the hospital by June 30, 1949.

It has been suggested that the plan of treatment initiated on the acute intensive treatment service following admission to the hospital is an important factor contributing to the early discharge and release on trial visit of many patients. A brief outline of the procedure at this hospital is presented in the following paragraphs:

All neuropsychiatric patients newly-admitted to this hospital are placed on the acute intensive treatment service. Complete neuropsychiatric and medical examinations, in addition to psychological and laboratory tests, are initiated immediately following admission. Initial social service planning is outlined; and a physical, educational or occupational rehabilitation program is put into effect for each patient. All newly-admitted patients are presented for preliminary staff discussions within 24 hours of their admissions to the hospital. At the preliminary meeting, staff physicians, residents, psychologists, social workers and occupational therapists are present. The preliminary "staffing" is conducted primarily to make an initial evaluation of the patient's mental illness, to determine whether any of the specific types of therapies are needed immediately, and to ascertain whether the patient requires any special consideration by any of the departments concerned.

The patients are brought before a final diagnostic and disposition staff meeting within three weeks of their admission. However, by the time this takes place, the patient, in most instances, is on one of the treatment wards of the acute intensive treatment service, to which he has been assigned for therapy. These wards include the insulin coma ward, electric-convulsive therapy ward and the open and closed acute intensive treatment wards, on which group and individual psychotherapy are stressed. Patients not found to be in need of acute intensive treatment are transferred to the continuous treatment service. Self-destructive, assaultive, and disturbed patients are assigned to wards on the acute intensive treatment service. Staff meetings and discussions are held on the various wards four days a week. At these sessions each case under consideration is fully discussed by all members attending the staff meetings. Whenever some specific form of therapy has not been started immediately following admission or whenever the type of therapy previously designated, is not meeting with satisfactory response, new recommendations are made and other procedures, including the various programs of re-education, psychodrama, prefrontal lobotomy, etc., are instituted.

With the incorporation of residents into the hospital program and with the enlargement of the neuropsychiatric staff, more emphasis is placed on individual psychotherapy. As a result of in-

tensive psychotherapy, the hospitalization period is considerably reduced in many instances, patients are able to leave the hospital sooner on trial visit, during which they have the opportunity to obtain follow-up psychotherapy at the mental hygiene clinics in the surrounding areas. Co-operation with the newly-instituted Social Service Pilot Program enables more patients to leave the hospital with the assurance that closer supervision will be maintained outside. This also helps keep patients on trial visit and in many instances prevents their return to the hospital because of minor difficulties. The enhanced and augmented medical and surgical facilities of the hospital are freely utilized; and, as a result of frequent consultations with the members of these two departments, the patient's well-being is more completely assured, leaving the psychiatrist free to devote most of his time to the patient's psychiatric problems.

The acute intensive treatment service at the time of this survey comprised 415 available beds, of which 95 per cent were in constant use.

Many patients who fail to respond to the more intensive type of therapy after a sufficient time, are referred to the reintegrative ward for further treatment before going to other wards of the continuous treatment service.

Summary

1. A survey and a one-year-minimum follow-up study made on June 30, 1949 of the total of 492 neuropsychiatric patients admitted to the Veterans Administration Hospital, Northport, N. Y., from July 1, 1947 to June 30, 1948, revealed that 253 (51.4 per cent) had been discharged and 63 (12.8 per cent) were still on trial visit at the time the study was made.

2. Patients discharged as no longer in need of hospital care totaled 210, or 42.7 per cent.

3. A tabulation of the types of mental illness, duration of illness, kind of treatment and results has been made.

4. Of 341 patients with schizophrenic reactions, 166 (48.7 per cent) were out of the hospital, either discharged or on trial visit, at the time this survey was made.

5. Follow-up replies to 210 letters, sent to those discharged as no longer in need of hospital care, were received from 163 patients and indicated that 19 of them had been hospitalized again for treatment of mental illness.

6. The lack of uniform discharge statistics, definite criteria of improvement and the difficulty inherent in correlating degree of improvement with ability to leave the hospital, prevent the establishment of any sound basis for a comparison of statistics.

7. The intensive treatment outlined as given patients immediately following admission is believed to be an important factor in the production of the results obtained.

Veterans Administration Hospital
Northport, N. Y.

A VISUAL-VERBAL TEST FOR SCHIZOPHRENIA

BY MARVIN J. FELDMAN AND JAMES DRASGOW

The present study deals with the construction of a new test to discriminate schizophrenics from the general population. It is hoped that such a test will prove to be useful both as a practical clinical instrument and as a means of studying schizophrenic thought processes. Twenty-five years ago, Harry Stack Sullivan[1] emphasized the utility for research as well as for practical purposes, of psychological tests in this area. Since that time numerous tests for schizophrenia have been, and are being, developed. There is, however, much room for improvement and refinement of the methods used; hence the present investigation was undertaken.

Previous Studies

To understand the theoretical foundations of the present test, it is necessary to trace two almost concomitant testing movements; one in Europe and one in America.

The European tradition arose in 1921 with Ach[2] whose basic work was extended along rather similar lines by Vigotsky,[3] Hanfmann and Kasanin,[4] and Goldstein and Sheerer.[5] These investigators all concluded that schizophrenics manifested considerable difficulty in formulating a group of objects into a concept, especially when an abstract concept is demanded by the stimuli. Moreover, schizophrenics manifested great difficulty in shifting from one concept to a totally different concept in a situation where two different interpretations could be made of the same stimulus objects. The general methodology in the European tradition consisted of presenting to the subject stimulus objects which could be sorted into different classes on the basis of the properties of the objects: e. g., color, form, size, etc. Although each of the authors claimed some success for his test in discriminating schizophrenics from normals, the overlap between groups was sufficient in every study to impair seriously the use of the test as a practical clinical tool. Other general criticisms are:

a. The data are presented in qualitative terms. b. (A corrollary of "a".) Inadequate statistics are presented in support of the conclusions. c. The tests contain too few items, a matter which tends to produce unreliable instruments. d. The apparatus used in many of the tests are too cumbersome for convenience.

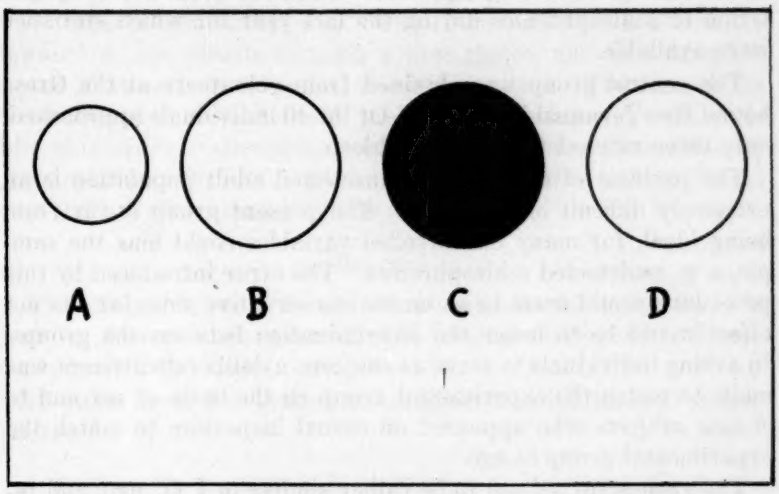
The American tradition, on the other hand, began with Babcock in 1930[6] and was extended primarily by Shipley[7] and Wechsler.[8, 9] These authors had a less theoretical approach to the problem. Their tests were based on the empirically-observed fact that some intellectual abilities seem to be grossly affected in schizophrenic disorders, while other intellectual abilities seem to remain relatively intact. The assumption was then made that measures of the latter abilities are representative of pre-psychotic levels of functioning, while measures of the former abilities are representative of the current level of functioning among the schizophrenics. In normals, when the necessary correction for age is made, no difference is found on the average between the two sets of abilities. The obvious possibility presented itself of using the discrepancy between the two types of abilities as a means of distinguishing schizophrenics. In all tests, the pre-psychotic level was estimated by a vocabulary test (as well as several others in the Wechsler) while the present level was ascertained by such diverse tests as memory, analogies, Koh's blocks, etc. The American studies introduced refined statistical techniques of analysis, large samples, and various other controls. In spite of these improvements, the studies to date have produced either equivocal results or results which meet only the minimum requirements of statistical significance. *The overlap* between groups is so great that these tests are of dubious value as practical clinical techniques.

In the present investigation, an attempt is made to combine the positive contributions of the two traditions while eliminating their defects. Thus the sorting principle of the European tradition is utilized, along with refined statistical and sampling methods characteristic of the American tradition. The number of items in the new test is large enough to promote reliability and the groups are matched fairly well.

Tests Used

The main visual-verbal test consists of two 3″x5″ demonstration cards and 43 similar test cards. Each card contains four stimulus objects as illustrated in Figure 1. Concepts can be formulated, using three of the four objects on the basis of color, form, size, structural similarities, naming, and function. Two such concepts can be formulated on each card. The concepts were constructed on an *a priori* basis, following the pattern of tests used in the Eu-

Figure 1. Sample card from the visual-verbal test



ropean tradition. The cards are balanced, both with respect to the number of ways in which the objects are alike and the position occupied by the objects. Hence, on some cards, the same three objects are used for both concepts; but, on most cards, different sets of three must be used to educe the correct answers.

Since color is the basis of some concepts, a brief color test is administered to determine if the subject can discriminate the colors actually used in the test proper.

Three of Wechsler's[9] "hold tests" (vocabulary, information, and picture completion) were used to equate groups in terms of I. Q., since concept formation and I. Q. are usually found to be highly correlated.

Subjects

The schizophrenic group was drawn from Buffalo State Hospital.* To be included in the group, a subject had to be diagnosed as schizophrenic by at least two psychiatrists working independently. To eliminate extraneous variables as much as possible, only first admissions, in residence less than six months, without "somatic therapy" were used. The schizophrenic group consisted of 37 cases. The only other restriction made in selecting cases was

*The authors wish to express their appreciation to the staff of Buffalo State Hospital for making hospital facilities available.

to make the sex ratios proportionate to the entire hospital population of schizophrenics during the last year for which statistics were available.

The control group was obtained from volunteers at the Greyhound Bus Terminal in Buffalo. Of the 40 individuals approached, only three refused to serve as subjects.

The problem of obtaining an unselected adult population is an extremely difficult one to solve. The present group is far from being ideal, for many uncontrolled variables could bias the sample, e. g., undetected schizophrenics. The error introduced by this procedure would seem to be on the conservative side, for the net effect would be to lower the discrimination between the groups. In asking individuals to serve as subjects, a deliberate attempt was made to match the experimental group on the basis of sex and to choose subjects who appeared on casual inspection to match the experimental group in age.

The groups turned out to be rather similar in I. Q., age, and reported grades of education. In these respects, the schizophrenics did not differ from the normals significantly; that is, none of the differences between the variables shown in Table 1 are statistically significant.

Table 1. Personal Data of 37 Schizophrenics and 37 Normals

	Mean I. Q.	σ	Mean C. A.	σ	Grades as reported	σ
Schizophrenics	96.8	15.4	28.0	6.4	9.9	3.1
Normals	97.7	14.6	28.9	6.1	10.4	2.9

The color test was given first to eliminate subjects who could not discriminate among the colors. None was eliminated.

The Wechsler subtests (vocabulary, information, and picture completion) were then given, and the results are shown in Table 1. A counterbalanced order of presentation might have been preferable. The order of presentation, however, would seem to have little influence in this case, since fatigue would not be great in the 35 minutes taken to administer all tests; and the Wechsler subtests differ so markedly from the visual-verbal test that taking one would seem to have little effect on taking the other.

The two demonstration cards and the main visual-verbal test were given last. The subject was told that each card contained

four objects; three of which were alike in some way and three were alike in some other way. The subject was given a time allowance of one minute to make a first choice, and then an additional 30 seconds to formulate a second concept. The time limits were arrived at on the basis of preliminary testing and were made liberal in order to eliminate speed factors. In most cases, the subject took from 10 to 20 seconds to formulate his concept. In no case did anyone exceed the time limits.

Results

Two general types of errors are possible on the tests; the subject can miss one concept on a card (a single miss), or both concepts (a double miss).

In Table 2, the two groups are compared on the basis of double misses.

Table 2. The Comparison of Double Misses on the Visual-Verbal Test of Schizophrenics and Normals

	N	Mean number of double misses	σ	Diff.	C. R.	P
Normals	37	0	0			
				2.57	5.47	.0001
Schizophrenics	37	2.57	2.80			

Although the discrimination is fairly good, schizophrenics have so few double misses that it would be difficult to use this type of error in clinical practice.

In Table 3, the two groups are compared on the basis of single misses.

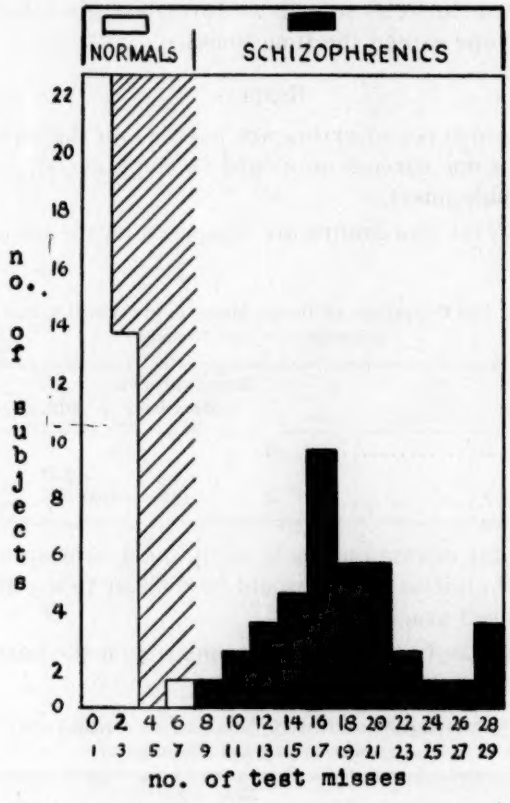
Table 3. The Comparison of Single Misses on the Visual-Verbal Test of Schizophrenics and Normals

	N	Mean number of single misses	σ	Diff.	C. R.	P
Normals	37	1.24	1.03			
				16.76	20.95	$<.0001$
Schizophrenics	37	18.00	4.81			

It can be seen that the single miss discriminates between the two groups with an extremely high degree of accuracy. In fact, these samples are discrete groups as shown in Figure 2, for none of the

normals make as many single misses as the lowest score obtained by a schizophrenic subject.* Since the discrimination is so much greater in terms of single misses, all further analyses will be presented on this basis.

Figure 2. A comparison of single misses between schizophrenics and normals on the visual-verbal test.



Relation of Visual-Verbal Test to Age and I. Q.

Since the ability to formulate concepts as demanded by the test might vary as a function of the age or the I. Q. of the respondent, these factors were investigated.

*To check the possibility of unconscious experimenter bias, the test was administered to 10 additional normal subjects by a different tester. The results were quite similar to those in the original sample in that the range of single misses was from zero to five with no double misses.

Table 4. The Correlation of Single Misses on the Visual-Verbal Test with Age and I. Q.

	N	Age	I. Q.
Normals	37	.08	.01
Schizophrenics	37	—.10	—.44*

*Significant at the 1 per cent level.

Table 4 indicates that neither age nor I. Q. bears any significant relation to test scores. Normal subjects covering a wide age and I. Q. range can make the simple discriminations demanded by the test with relative ease. Table 4 also indicates that single misses on the test are related to intelligence in the schizophrenic group. Nevertheless the most intelligent schizophrenics (I. Q. = above 130) make more errors than the least intelligent members of the normal sample (I. Q. = less than 80). It can be concluded that the impairment of conceptual thinking found in schizophrenia is rather pervasive and only partially forestalled by high intelligence.

Analysis of Individual Cards

When the individual cards are compared, it is found that 34 of the 43 cards discriminate the two groups at the 1 per cent level or better, five cards discriminate at the 5 per cent level, and the remaining four cards discriminate at the 10 per cent level. Thus almost all of the cards proved to be effective.

The nine cards discriminating at the 5 per cent and 10 per cent levels (and consequently having the lowest critical ratios) were compared on an inspectional basis with the nine cards at the 1 per cent level having the highest CR's (that is, which differentiated most between normals and schizophrenics) in an attempt to discern further, and potentially more basic, differences in concept formation. It was found that the least-discriminating items involved concepts based on color or size, while the most-discriminating items were primarily based on naming objects, e. g., three are mice, and pointing out structural similarities which the objects possessed, e. g., three have straight lines. If concreteness is defined as the recognition of an object on the basis of the immediate sensory properties of the stimuli, then color and size concepts would seem to be more concrete than concepts based upon structural similarities or naming. None of the concepts in the test, however, demands a high level of abstraction (witness the perform-

ance of normals). What is the significance of the failure of schizophrenics to formulate abstractions that are so simple for most normals? Conceptual impairment in schizophrenia has frequently been described as intellectual deterioration.[6] This description is relatively static, inasmuch as there is little more to say once the investigator has arrived at this conclusion. Moreover such description becomes almost meaningless if it can be demonstrated that the impairment is reversible with favorable therapeutic results.* An alternative hypothesis would be to consider conceptual impairment in schizophrenia as an extremely primitive ego-defense-mechanism which is usually used only when other defenses fail. The failure of the ego to make even simple abstractions is an effective way of withdrawing from and shutting out the hostile and fearful environment perceived by the schizophrenic. This is a defense of last resort, for while it may ward off anxiety, it does so at the price of precluding ordinary commerce with the environment.

Our knowledge of schizophrenic thought-processes might be considerably enhanced by using the foregoing suggestion as a basis for integrating psychoanalytic theory with the observed fact of conceptual impairment in schizophrenia.

The level of abstraction seems to be an important factor on the test, but the fact that schizophrenics make many single misses and few double misses lends credence to the notion that the factor of shifting is also important. An inspectional analysis of the data was conducted to elucidate this point further. On cards containing two concrete concepts, it appeared that schizophrenics had little difficulty in making the shift. On cards containing one concrete and one abstract concept, the schizophrenics evinced difficulty in shifting; but almost invariably the more abstract concept was missed. Thus it appears that shifting *per se* is not important.

On the basis of the present observations, the theory of shifting must be modified to the position that once a schizophrenic formulates a concrete concept on a given set of stimuli, he will have difficulty in evolving the abstract concept contained in the same stimuli. Even the latter proposition may ascribe more importance to shifting as a factor than is warranted. A simple test, however, could easily determine the efficacy of shifting as a factor in conceptual impairment in schizophrenia. The discriminating power

*The authors intend to make a study of this in the future with the visual-verbal test.

of a set of items, each of which contained one abstract concept, could be compared to the discriminating power of the same concepts presented in conjunction with a concrete concept on each card. If the latter test discriminated schizophrenics from normals better than the former, it would seem that the factor of shifting would be relevant to the theory of conceptual impairment. The present results, however, seem to indicate that the inability of schizophrenics to formulate abstract concepts is more important than the inability to shift once a concept has been formulated.

Conclusions

The test accomplishes its purposes to some extent, in that the control and schizophrenic groups under study can be discriminated with a high degree of accuracy. Since the test is still in the process of being standardized, the authors do not recommend its use in clinical practice until an independent check is made on a new sample. The addition of new cases will also make possible more stable norms and will provide an independent test group when the nine non-discriminating items are discarded. If the test is to have practical clinical utility, however, it must be demonstrated that the test distinguishes schizophrenics from other diagnostic categories. Work by Becher[10] on discriminating schizophrenics from organic brain damaged cases is now in progress, and other groups will be studied in the future.

The test sheds little new light on the language and thought processes of schizophrenics since many previous investigations have demonstrated the concretization of thought in this group. The study does indicate that the schizophrenic's inability to formulate abstract concepts seems to account for conceptual impairment to a greater degree than the inability to shift from one concept to another with the same set of stimuli. It should be stated, however, that only a few gross comparisons of thought processes have been made. Further study of the data is planned to determine: (a) what concepts are given, if any, by schizophrenics, in place of the correct concepts; (b) if any specific verbalizations characterize the language of schizophrenics.

The clear-cut results obtained in this study lead the present writers to conclude that the original theory that led to this research is a most fruitful one, worthy of intensive study. In turn, the study demonstrates that the predictive power of a theory de-

pends upon an adequate test of the theory. Thus the efficacy of the visual-verbal test seems to result from a fruitful hypothesis combined with adequate test construction and methods of sampling and control.

Summary

1. The aim of this study was to construct a test to discriminate schizophrenics from normals. This was done by an *a priori* construction of items based upon the theory that schizophrenics have difficulty in (a) formulating abstract concepts and (b) shifting from one concept to another with the same set of stimuli.

2. The test of 43 items was labeled the visual-verbal test of concept formation. The test scores discriminated schizophrenics from normals with a high degree of accuracy.

3. In the normal sample, test scores were not related to either age or I. Q., while in the schizophrenic sample, test scores were not related to age but were related somewhat to I. Q.

4. The data indicated that the impairment in conceptual thinking in schizophrenics is determined to a greater extent by their inability to formulate abstract concepts than to the inability to shift from one concept to another with the same set of stimuli.

Psychological Clinic
University of Buffalo
Buffalo, N. Y.

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A REPORT ON THE APPLICATION OF GROUP PSYCHOTHERAPY AT UTICA STATE HOSPITAL*

BY ERNEST GOSLINE, M. D.

I. Introduction

Group psychotherapy is a practical method available to the institutional psychiatrist who wishes to provide psychotherapy for psychotic patients. Pratt, in 1906, recognized the time-saving and personnel-saving aspects and gave inspirational lectures to groups of tubercular patients. His work was later extended by Harris, Rhoades, Buck and Emerson to the management and treatment of patients with diabetes, hypertension, peptic ulcer, various psychosomatic ills, and mild psychoneuroses, and eventually developed into the so-called "thought-control" clinics at the Boston Dispensary.

In 1908, Moreno had begun studies with groups in Vienna; his theories about the interaction of individuals in groups became the basis of the psychodramatic approach to the treatment of psychotics. Lazell treated in-patients at St. Elizabeths Hospital in Washington in 1921 with essentially a lecture-discussion method. These unusually complete lectures were based on psychoanalytic psychology, and socialization was emphasized; discussions and inspirational readings were encouraged. In 1931, March developed a group therapy program at Kings Park State Hospital, based on a method which he called the "psychological equivalent of the revival." He described the group treatment of large masses of psychotics, using the suggestive and inspirational elements of the religious revival meeting and he claimed considerable success with this method. Enthusiastically, he employed as his motto the phrase, "By the crowd have they been broken—by the crowd shall they be healed." Although swayed by his own zeal, he presented practical and progressive ideas, and he first formulated adequately the inspirational approach to group treatment.

Group psychotherapeutic methods may be considered inspirational, educational, or analytical in orientation. The inspirational approach is directed toward the repression of asocial thought and action, and acceptance of social mores and ideals. The educational

*Read at the upstate interhospital conference, Syracuse Psychopathic Hospital, Syracuse, N. Y., April 25, 1950.

approach depends on the promotion of intellectual and emotional understanding by lectures, identification with subject matter, and "objectification" of internal conflicts. The analytical approach proceeds from the immediate conflicts of the individual members, and attempts to diminish repression, verbalize conflicts, interpret unconscious material and develop insight.

Marsh's success with his method was supported from an unexpected quarter in 1935 with the formation of the A. A. (Alcoholics Anonymous). This organization emphasized a "religious experience," but also used many inspirational techniques. Altschuler in 1940 modified earlier methods with the use of rhythmic exercises, group singing, current events, short stories, daily slogans, and discussions based on psychoanalysis. She considered the subject matter less important than the harmonious interaction of body, mind, and senses—both visual and acoustic—in the therapeutic realization of social unity. Starting with this concept, Wright and Jacobson experimented with an original technique in which emotional significance was attached to simple volitional acts. They employed the suggestive elements of the group situation extensively. Blackman, in 1942, described a type of mass group therapy in which the entire hospital ward was treated in one group. Pelzman, at Central Islip State Hospital, included large inspirational groups as part of the hospital group therapy service and has promising results.

In his book, *The Theory and Practice of Group Psychotherapy,* Klapman described the basis of group therapy with psychotics as a series of lectures, educational in approach and flexible in scope. He encouraged patients to apply the material discussed to their personal difficulties. Weinberg in 1946 employed this method with psychotic patients in military service; he discussed a wide range of topics and interpreted material produced by patients. Luchins combined the inspirational and educational aspects by conducting large inspirational meetings, followed by small discussion groups directed by social workers. Kusch and Lucas at Manhattan State Hospital prepared a series of lectures with discussions for patients and their relatives, in preparation for placement of patients on convalescent care. Geller supervised social workers for educational groups and indicated that this educational approach could be relegated to psychiatrically-oriented personnel, leaving the more interpretive psychotherapy to the psychiatrist.

Another approach to group psychotherapy, in which the analysis in small groups of the material produced by the patients was of primary importance, was formulated by Wender in 1936. He used group therapy as an adjunct to individual therapy, and related improvement to intellectualization, patient-to-patient transference, catharsis, and group interaction in a symbolic family situation. Ackerman extended these concepts by considering the group situation an experience in reality; he emphasized that group therapy was an independent method which "neither competes with nor substitutes for individual therapy." Paul Schilder, working with psychotic and severe psychoneurotic reactions, recognized unique qualities in groups which helped transform the symbolic insight of the individual analysis into concrete and living experience. Geller applied this method successfully to chronic psychotic patients, and indicated its usefulness in institutional psychiatry. Foulkes described the method in a monograph on *Group-Analytic Psychotherapy* and clarified the role of the therapist. Alexander Wolf amplified the method and, recently, published articles on the use of psychoanalysis in groups.

Special techniques such as the psychodrama of Moreno and activity groups of Slavson, although applied to the treatment of psychoses, have not been adequately investigated and are therefore not included by the writer.

II. Application of Group Therapy Program

In 1949, a group therapy program was established at Utica State Hospital by the director, Dr. Francis J. O'Neill. The method was adopted as a practical way to treat large numbers of patients. The plan of organization was based on the writer's study of the group therapy programs at Central Islip, Manhattan and Brooklyn State hospitals. Meetings were begun on September 6, 1949; and, at present, nine groups meet at weekly intervals for one-hour periods. (One of these groups was excluded from this study—it was the pre-convalescent guidance meeting based on the lecture-discussions described by Kusch and Lucas.)

Meetings were attended by a psychiatrist and by a social worker; visitors were allowed to attend. Patients were informed of the voluntary nature of the sessions, but were urged to attend regularly for the maximum benefit. There were no mixed groups (male and female) and the usual number present was eight to 12

patients. Discussions based on material produced by the patients were carried on in a permissive atmosphere, and interpretations of material were made when indicated. The aim of therapy was toward increased insight.

Because of the voluntary nature of the meetings, a careful selection of patients was not attempted. Many varieties of chronic psychiatric illnesses were included, with differences in diagnosis, prognosis and length of hospital stay. Ages ranged from 15 to 72 years. Disturbed patients and organic cases were excluded. Overt homosexuals and psychopathic personalities were usually discouraged from attending, because of their destructive patterns in groups. Prior to inclusion in the group, patients were interviewed to establish rapport and to evaluate their conditions. The hospital record was also studied and summarized on a special form. Records were kept of each meeting and of each member's response to it.

In a careful study of these records, the writer reached the following conclusions. The meetings were analyzed as to the functions of the therapist, the social worker, the individuals in the group and the total group. Topics of discussion and group dynamics were also considered.

The therapist had an active and important role in the group function, since his attitudes first established the permissive atmosphere necessary to therapy. As his role may be that of an object of identification, an object of libidinous and aggressive drives, and a source of ego support (Redl), the therapist's personality must be sensitive to variations in group and individual reaction, and his approach directed accordingly. Over-aggressive attitudes by the therapist led to group rebellion. On the other hand, the writer found that an over-permissive attitude resulted in such anarchy and confusion that there was no therapeutic progress, and the group became fearful of its own aggression. In fact, an authoritarian and repressive approach was welcomed by the group in the presence of over-aggressive members.

During the first few meetings, the therapist explained the purpose of group therapy, the nature of mental illness, and the meaning of hospitalization. Members often responded to these discussions with hostility and many complaints against the hospital. Although usually dependent on the therapist for their function, some of these early groups were disrupted by more destructive

individual members. One litigious paranoid patient, for instance, markedly hindered group progress for a month by his provocative complaints about "illegal" confinement. Patients directed questions to the therapist, expecting an authoritarian answer. They avoided specific personal problems and identified with more general discussions. Although group interaction formed slowly, patients receiving insulin presented their personal problems for interpretation earlier than other patients. As meetings progressed and more personal material was expressed by the members, they became dependent upon the therapist for interpretation. Gradually, however, they attempted to understand each other's problems. The increase of transference reactions made the therapist's role more complex, varying between a permissive parent, a teacher, a model or ego-ideal, a repressive autocrat, and an object of emotional understanding. For example, much to the amusement of the group, one middle-aged patient exclaimed enthusiastically that the young therapist was "more like a father than my own father."

During the holiday season, the writer used inspirational methods in many groups with excellent affective release and enthusiasm. The hypersuggestibility of the group situation was effectively demonstrated when the therapist requested three wishes from each member and the group seriously questioned if he could magically fulfill their wishes. At times the therapist must protect the group, as was shown when a woman in a catatonic episode misidentified group members excitedly with her own family and attacked them verbally with much hostility. Although rejecting the behavior of this patient, the group closely watched the therapist's attitude in handling the problem. When satisfied with his consistent permissiveness and lack of censorship, they responded in later meetings with increased spontaneity and security in discussing personal topics.

The social worker, also, was actively included in the therapeutic situation. Her professional acquaintance with social agencies, convalescent and family care, and the many practical aspects of social adjustment offered much educational material to the group. Her non-directive role facilitated rapport, positive identification, and acceptance by the group. This was demonstrated especially in the therapist's absence. In early meetings, the social worker functioned as a passive recorder. As the groups progressed the warmth of the worker's personality, her interest in the patient, and

her rational approach to social reality aided in greater security and friendliness in the group. Patients unable to identify with the therapist, possibly fearing interpretation of unconscious material, were able to relate to the group through the social worker.

Visitors were welcome at all meetings and attended frequently; at no time did this deeply affect the group situation. In several cases, the added interest, enthusiasm, and attention shown the group were definitely beneficial.

The topics selected by the group provided material for individual identification and for the projection of conflicts. During the progress of therapy, the writer found that they proceeded from the general and socially accepted to the personal and socially tabooed. In contrast to the course in individual therapy, sexual topics were noteworthy by their late and indirect appearance. Sexual conflicts were expressed only when group transferences were firmly established.

Early discussions centered about the reasons for admission to a state hospital and the meaning of mental illness. Although there were loud complaints about unfair treatment and angry self-justifications, the groups were also sincerely interested in what was meant by "mental illness" and how it applied to them. The concepts of "insanity" and of "mental illness" led to a discussion of the legal and the medical aspects of the patients' own hospitalizations. Certification papers were demonstrated. Complaints about the hospital were accepted, and an effort was made to explain—objectively—hospital routines, medical and psychiatric treatment, and convalescent care. The patients learned to approach the convalescent care conferences in a realistic manner. Discussions about shock treatment released much anxiety. Reassurance was also required concerning the lobotomy procedure.

As meetings progressed, the material became related to difficulties in adjustment to society. The "stigma" of mental illness was discussed with much feeling and resentment. Religious adjustment was a difficult topic; one patient consistently used his Biblical knowledge to refute the therapist's interpretations. In discussing family adjustment, there was much group interaction and expression of hostility. In one case with a history of sexual assault by the father, this topic precipitated a sudden catatonic episode; this cleared when the patient was reassured that she did not have to discuss her family situation. At a later date she vol-

unteered information with no difficulty. In relation to this topic, the development of children interested both male and female groups, with good understanding from the members.

Resistance to personal topics was evident; and, when the group approached these, some members excused themselves. Those remaining became interested in the varieties of self-expression. Thus the group was able to understand the unexpected request of a mute catatonic for a cigarette as a renewed interest in human contact. Members enlivened these discussions with creative work such as poetry, writing, and drawings. Patients were interested in psychiatric symptoms and often showed surprising familiarity with psychiatric terms. The therapist's explanation of anxiety and the recognition of the symptoms in each other was a relief to many, as was demonstrated when one chronic psychoneurotic stated that group therapy had relieved the shame he had felt for his anxiety attacks. Hallucinations were related to dreams, illusions, hypnogogic states, and artistic creation, alleviating the patients' guilt and isolation. In one dramatic instance, an open ward patient fearfully reported the return of his "voices" and asked to be placed on a closed ward for protection. Patients expressed an interest in death, suicide, depression, and mourning. This was often traumatic; and the group depended on the therapist for protection. Delusional material was freely expressed and in a few instances was definitely altered by the group.

The interpretation of attitudes, dynamic material, and personal difficulties made the number of topics inexhaustible.

These notes serve to give an example of the wide range of material in the meetings and the flexibility of the method. Records were kept of individual progress, group sessions, and individual reactions to each session. Special individual progress sheets were used for essential information from patients' records, interviews, special treatment, change of status, and termination of treatment. To give an accurate index of group progress, the therapist and social worker together recorded the general course of each session. There was a practical attendance card for individual reactions, on which the patient was graded numerically as to degree of socialization and insight. These factors included attention, productivity, relevance, general attitude and behavior, group-directed content, group identification and aggressiveness. No attempt was made at verbatim recording.

III. Results

A. *Statistical Analysis*

The evaluation of results from group psychotherapy has been inadequate because of the concurrent use of shock treatment, individual attention, recreational and occupational therapy. Because of these inherent difficulties few attempts have been made at statistical analyses. On the basis of 1,900 patient-hours of treatment and 170 meetings, the writer has compiled the following statistical results:

Patients treated by group therapy	Male	Female	Total
Total number	113	105	218
Number improved	69	72	141
Number unimproved	38	26	64
Number worse	4	6	10
Number leaving the hospital	49	51	100

A seven-month period was chosen for this study (September 1949 through March 1950). Sixty-five per cent of the patients attended meetings for more than one month. The average size of the groups was 11, although attendance ranged from four to 18. Forty-eight meetings were held on the admission service and the remaining 122 on the various continued treatment services. Individual improvement could not be adequately shown statistically because of variations in diagnosis, prognosis, and length of hospital stay.

B. *Clinical Observations*

In addition to the statistical results, improvement was also shown at the dynamic level. The release of hostility and resentment by the group was significant, and its good-humored acceptance by the therapist diminished guilt and fear of retaliation. As the morale increased, members returned to the ward with enthusiasm and new information. The educational material helped the patient to understand his hospitalization and alleviated much misapprehension. This approach was especially helpful in relieving anxiety. The intellectual stimulation was evident in the increase in reading, interest in current events, creative work, and curiosity. Results were also accomplished on the level of social adjustment. Although the group repressed disturbing elements and rejected sociopathic traits, it encouraged withdrawn members to give up

their isolation and become aggressive. It may be said that the most consistently observed result in the meetings was the increased socialization of patients.

At deeper levels of interpretation there were indications of improved insight. Members identified the group as a symbolic family and, at this level, expressed transference reactions suggestive of sibling rivalry. Such reactions often increased a patient's resistance to therapy and were aggressively attacked by the group. Paranoid patients used the group situation to "test" the reality of their delusional systems. Members often vied for attention and expressed open jealousy. Ambivalent attitudes were quickly perceived by the group. As analysis progressed, the patients gradually gained insight into social attitudes, interpersonal relationships, and, in some cases, into their own psychoses. As an illustration, one female patient responded in early meetings with resentment toward the male figure. Her rapport with the social worker, however, enabled her to participate actively in the group. The group situation enabled her to express her ambivalence and demonstrated the irrational basis of her hate reactions. On discharge she was able to return to her husband and to adjust satisfactorily.

IV. Discussion

The practical aspects of group therapy have been previously indicated statistically and dynamically. Most important is the method's accessibility to large numbers and types of patients. The fact that much of the educational approach can be also given by psychiatrically-oriented personnel with group experience greatly enhances its applicability. Better ward morale, co-operation of the patients, increased interest, improved social adjustment are also practical from a supervisory standpoint. Although the study is too short to verify this, it is suggested that patients leaving the hospital adjust better to convalescent care. As part of the "total-push" program, group therapy has an important place and may be used in conjunction with other types of psychiatric treatment.

Many of the theoretical aspects of group treatment are still undefined. It is, however, well established that the placement of individuals in such a reality situation as the group fosters social adjustment and combats schizophrenic isolation. The inspirational approach creates a pleasurable reality; and, by extrover-

sion, one tries here to "lure" the patient from his psychosis. In the educational approach one strives for an intellectual understanding of problems. In the analytical orientation the hope is to attain true emotional insight. In all three methods, the patient must relate to other people and become a social being instead of an isolated individual. The discriminate use of these approaches by the psychiatrist offers a form of psychotherapy useful in the treatment of psychotic patients.

V. Conclusions

1. Three methods of approach to group psychotherapy are described.
2. Group therapy may be used with psychotic patients. Its applicability is established statistically and dynamically.
3. The method may be used with individual therapy or as a definitive treatment.
4. Social workers may give group therapy, using the educational approach.
5. Group therapy is able to produce dynamic personality changes, increase socialization, and promote insight in psychotic patients.
6. Group therapy is a practical method of treatment which may be used in mental institutions as part of a general therapy program.

Utica State Hospital
Utica, N. Y.

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COMMENTS ON THE RELATIONSHIP OF THE RESPONSIVITY OF THE ADRENAL CORTEX AND SCHIZOPHRENIA*

BY J. H. FRIEDLANDER, M. D.

With the isolation of cortisone and ACTH, the role of the adrenal cortex and its relationship to various diseases is again being closely scrutinized. This is particularly true of its relationship to schizophrenia. That some relationship exists has been postulated frequently in the past, and some of the concepts advanced were very persuasive. Yet however persuasive these concepts were, proof of validity was conspicuously absent. The theories advanced by Hoskins[1] and Langfeldt[2] are still valid, and as a result of the work of Selye[3] and others, supportive evidence for a positive relationship between the adrenal cortex and mental changes is beginning to accumulate.

Despite the paucity of gross pathological findings in the endocrine system of schizophrenics—a paucity which incidently is frequently offered as proof that the endocrine system is uninvolved in this condition—the relationship between endocrine function and schizophrenia is, to the writer, inescapable. This relationship does not imply actual organic disease but there is some evidence for believing that an endocrine dysfunction exists, that there is an impairment of endocrine response to stimulation rather than a "disease." For example, in the experimental animal subjected to stress, hypertrophy of the adrenal cortex is frequently a post-mortem finding.

This discussion will be confined to the relationship of the adrenal cortex and schizophrenia. It is based on research confined mainly to adrenal function and on personal observation in a large neuropsychiatric hospital. Most of it is pure conjecture; and while there is considerable supporting evidence, incontrovertible proof is for the most part lacking. There is little doubt that many questions will be answered, and perhaps many theories disproved, in the near future. Considerable research into this problem is going on at the present time at the Northport (N. Y.) Veterans Administration Hospital and elsewhere.

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To begin the discussion, one may postulate the following in schizophrenia: An intrinsic endocrine defect or vulnerable endocrine system is present. There are too many straws in the wind pointing to a familial susceptibility in schizophrenia, to be ignored—a susceptibility that cannot be explained adequately on an environmental basis. One might also state that, as this disorder is so often associated with cases of gross endocrinopathy, there is a faulty central nervous system, either structurally or functionally, probably both. This is certainly a vague statement, but it is advanced in partial explanation of the untoward reaction of certain individuals to relatively minor stress, stress to which a "normal" individual readily adjusts.

Assuming that this susceptible individual is subject to repeated episodes of environmental stress or to a single psychic trauma of a severe nature, and there seems to be general agreement that such histories play an important role in the development of a psychosis, the question arises as to what happens to the pituitary-adrenocortical mechanism as a result of this stress. At this point, one may leave the realms of conjecture and deal with effects which can be observed and measured.

The one constant measurable feature of a "normal" response to stress is an increase in the secretory activity of the adrenal cortex. To the best of present knowledge, this is caused by the stimulating effects of the secretion of adrenocorticotrophin (ACTH) from the pituitary gland. The pathway or mediation by which the pituitary is stimulated is unknown. Various pathways and mediators have been suggested including the stalk of the pituitary, the hypothalamus, changes in the electrolyte content of the blood, etc., but proof is lacking. The type of stress that can initiate increased adrenocortical secretion may be of any variety, extrinsic or intrinsic. This includes environmental stress, stress of a traumatic or infectious nature and psychological stress. In a normally responsive individual such stress will produce an increased activity of the adrenal cortex. There is ample experimental evidence to support this statement.

The activity of the adrenal cortex has been measured in numerous ways: Serum ascorbic acid levels, urinary uric acid, protein fractionation determinations (alpha, beta and gamma globulin), lymphocyte counts, eosinophile counts, 17-ketosteroid levels, plasma and urinary corticosteroid determinations and sodium and

potassium levels in the Northport hospital laboratory; many of these have proved to be unsatisfactory indices of adrenal cortex function; and though, theoretically, they should reflect cortex activity, they do so in an inconsistent fashion. In the writer's experience, the best index of activity of the adrenal cortex or of its lability has been the change in level of the 17-ketosteroid and urinary corticosteroid secretion.

To produce stress experimentally[4] both in patients and laboratory animals, the following methods have been used: injection of epinephrine or insulin, induced motor activity, induced psychomotor activity, electric shock, and, finally, injection of ACTH. The last is the best physiologic stimulus since the secretion employed is the natural physiologic response of the pituitary to any type of stress.

To continue with the subject of response to stress, the susceptible individual (who will eventually show a schizophrenic reaction) responds to the best of his ability to stressful situations with continued hypersecretion of the adrenal cortex. The stresses vary in intensity and, to the patient, may be of an intolerable nature. It is finally noted that the adrenal cortex no longer responds briskly to continued stimulation. Again, there is experimental evidence to support this statement. Schizophrenic patients show a lowering of cortical response to stress in inverse ratio to the severity of their illnesses. The further removed from reality they are, the less cortical response is elicited with standard stimulation.* Two explanations may be offered for this last observation, but one must return to conjecture since no proof is as yet available.

First, as a result of continued hypersecretion of the adrenal cortex in response to long-standing or repeated stress, there is physiologic exhaustion of the gland, followed by inadequate or absent secretory response to any further demands upon it. This inability of the cortex to respond may be responsible for the withdrawal of the individual from stress, and into another environment, his psychosis.[5] If, in addition, there is an intrinsic endocrine defect, exhaustion may occur relatively early.

The second explanation, also of a presumptive nature, is that the development of a psychosis in an individual is a protective

*As standard stimulation at Northport, 25 mg. of ACTH intramuscularly are used. Determination of cortex activity is done by determining corticosteroid levels on four-hour urine specimens before and after the ACTH injections.

mechanism, which accomplishes, more or less completely, a removal of the individual from the stress to which he has been subjected. In both of these tentative explanations the end-result is to put the pituitary cortico-adrenal mechanism at rest, when, beyond a basal secretory level, it will respond slightly or not at all to further stimulation.

One occasionally sees patients who have been hospitalized for years, who are mute, withdrawn, soilers; who have failed to respond to electric or insulin shock, and who have finally been relegated to back wards. Suddenly a patient such as this, begins to talk and, seemingly over night, is again in contact with reality. What explanation can be offered for this phenomenon? This patient's pituitary adrenocortical mechanism, because of exhaustion, had been unresponsive to stimuli. Convulsive therapy evoked no response. It is known that the patients who respond best to shock therapy are those in whom shock causes a brisk adrenal cortex secretion. A patient may be far removed from stress; and, after some years, the resting adrenal cortex finally becomes responsive again.

This explanation, while mainly presumptive, is susceptible to some confirmation. It has been shown in the writer's work[6] that patients responding briskly to 25 mg. of ACTH, respond in a similar fashion to electric shock therapy, with a corresponding improvement clinically; and, conversely, that failure to respond to ACTH predicates probable failure of EST. The writer has also taken 17-ketosteroid levels on regressed patients and, again, following spontaneous clinical remissions and has noted marked increase in the secretory level.[7]

Before concluding, a few comments are offered regarding psychotherapy and the adrenal cortex. The writer is aware of the numerous and often complex psychoanalytical interpretations of the results of psychotherapy. But what is the physiologic sequence of events? We are confronted with a patient with an overworked adrenal cortex, which is trying, and not too successfully, to meet the demands upon it; and, perhaps, during treatment, some traumatizing material is brought to the level of consciousness. This provides further stress to an already overworked pituitary-cortico-adrenal system. It is not surprising then, that the adrenal cortex fails and the patient becomes worse. The process, to offer a crude analogy, may be compared to the whipping of a tired horse.

In another patient, with an unresponsive adrenal cortex, one which is beginning to rest, the same procedure might well cause an initial response of the adrenal cortex, only to have it fail quickly and sink the patient further from reality than previously. Such untoward clinical responses to psychotherapy are not infrequent. The numerous cases of successful psychotherapy may likewise be attributed to resolution of conflicts and thus removal of the stress, with subsequent resting of the adrenal cortex.

One is aware that, all too frequently, a patient is seen who fails to respond to any form of therapy, whose course is progressively down hill with no remission. In cases such as these, one must postulate irreversible brain changes of an organic nature. This concept is not wholly without confirmation either in the experimental animal or man.[8, 9]

In passing, it might be mentioned that the somatic effects of experimental stress are striking. Severe disease has been produced, some of which was of a generalized nature. Lesions indistinguishable from periorteritis nodosa were caused by increased adrenal cortex secretion to, presumably, toxic qualities. Also produced experimentally, were the so-called hormonal kidney, hypertension, and arthropathies. Is it reasonable then, when such generalized lesions can be produced, to assume that the central nervous system escapes unscathed?

Medical Service
Veterans Administration
Northport, N. Y.

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THE VETERANS ADMINISTRATION HOSPITAL RECREATION PROGRAM FOR NEUROPSYCHIATRIC PATIENTS*

BY B. E. PHILLIPS, Ph.D.

There are now, in 131 Veterans Administration hospitals throughout the country, approximately 100,000 patients, more than half of whom have psychiatric and neurologic disabilities. Approximately 45,000 of these patients are housed in 33 neuropsychiatric hospitals, more properly identified as hospitals with predominately neuropsychiatric patient population. Most of the remaining 8,000 neuropsychiatric patients are in 16 general medical hospitals and centers. Approximately 80 per cent of the neuropsychiatric patients have been hospitalized for more than one year.

For purposes of brevity, the writer will hereafter use the abbreviation "V.A." when referring to the Veterans Administration, the term, "psychiatric" in preference to the term, "neuropsychiatric" or the phrase "psychiatric and neurologic" when referring to patients, and the term "mental" in preference to "neuropsychiatric" when referring to hospitals.

Before discussing the hospital recreation program, a word or two should be said about the integrated treatment program for psychiatric patients in V.A. hospitals.** The goal of this treatment program, as expressed by the V.A. department of medicine and surgery, "is to enable the psychiatric patient to effect an adjustment to his surroundings which is satisfactory both to him and to the community. For one patient this may mean adjustment after discharge from the hospital; for another it may only mean that he becomes a better citizen of the hospital in which he remains."

Within the V.A., psychiatric patients are thought of as falling roughly into two broad categories: the acute intensive treatment patient, that is, the patient whose illness is of recent origin; and

*Read April 13, 1950, at the Institute for the Recreation Personnel of the New York State Department of Mental Hygiene, at Creedmoor State Hospital, Queens Village, N. Y. The writer acknowledges the contributions of members of the V. A. Central Office staff and of hospital recreation personnel, without which this paper would not have been possible.

**Much of the following discussion on the integrated treatment program is contained in the Veterans Administration department of medicine and surgery publication TB 10-504, 1949.

the continued treatment patient, or the patient who has not responded favorably to intensive therapy during the early part of his hospitalization and for whom, therefore, prolonged hospitalization is indicated.

The acute intensive treatment patient receives prompt examination, evaluation, and intensive therapeutic regimens. Shock therapies and individual and group psychotherapies are frequently part of a total treatment which includes various re-educative and resocializing techniques. Early improvement or recovery from the illness often follows, and discharge of the patient from the hospital may be anticipated.

The objectives of treatment for continued treatment patients, on the other hand are: (1) the maintenance of good physical health, (2) the continued stimulation of the patient to maintain contact with and to respond to his environment, and (3) the encouragement of the patient to develop healthy, satisfying interpersonal relationships with the staff, with other patients, and with the community. These objectives are also attainable by re-educative and resocializing techniques.

Within the V.A., the chief of professional services at any given hospital is responsible for over-all treatment plans. It is he who assumes responsibility for the formulation of master schedules in an effort to utilize efficiently the services of all personnel who are in contact with patients. The ward physician, on the other hand, transforms these broad outlines of treatment into schedules of specific activities for all patients on his assigned wards. He is the captain of the medical team which consists of members of the clinical psychology service, nursing service, social service, physical medicine rehabilitation service, and special services. The ward doctor acts as administrator, consultant, and teacher to the members of these services, as well as physician to his patients. He it is who co-ordinates the efforts of the various services in providing additional media of diversified types for the diagnosis of specific disease entities, and for the evaluation of patients' capacities, abilities, and disabilities. He uses the numerous modalities provided by these services to foster interpersonal relationships, to sustain patients' interests, to encourage their undertaking progressive responsibility, and to prepare them for return to the community or for a more satisfactory hospital life. He guides these services in

the physical, mental, social, pre-vocational, and recreational adjustments of patients.

Treatment plans are constructed for each patient but, since the numbers of patients are large, individual treatment plans are modified for the most part, or adapted to group execution. To achieve adequate homogeneity for suitable group participation, patients are not selected for groups in terms of diagnostic categories which are broad and encompassing, but in terms of behavior, needs, age, interests, and other pertinent factors. In most mental hospitals within the V.A., this selection and grouping is effectively accomplished by organizing the hospital into disturbed wards, quiet wards, infirm wards, and the like.

With this over-all picture of the integrated treatment plan for psychiatric patients in V.A. hospitals, the writer will turn now to a description of the recreation program and an analysis of its place in this integrated treatment plan. Special Services has been mentioned as a member of the medical team. Special Services within the V.A. consists of four distinct services, the recreation, library, canteen and chaplaincy services. The present discussion is not of the entire Special Services program, of course, but only that phase of it which comes within the purview of the Recreation Service.*

Simply stated, the recreation program has two primary objectives. The first is to assist the doctor in getting his patients well; the second is to make life as satisfying and meaningful as possible for those patients who must remain in the hospital. All activities are directed toward these ends.

Dr. Karl A. Menninger, in an article, "Mental Patients Predominate at This General Hospital," which appeared in the professional journal, *Hospitals,* in October 1946, stated well the present position of the V.A. Recreation Service as regards the employment of recreation activities for patients in V.A. mental hospitals. To quote from his paper:

"The doctor should know whether the patient in his charge needs vocational counseling, athletic exercise, digitalis, a herniotomy or psychotherapy. What the patient needs, the doctor should prescribe.

*In the V.A., F. R. Kerr is the assistant administrator for special services, W. H. Orion is the director, recreation service.

"It isn't a question of whether or not the patient fancies landscape gardening, gin rummy or baseball. The fact that the patient fancies it is one fact that the doctor will bear in mind, but the prescription of treatment is not based on fancy . . . What the doctor decides he will state, and he will state it in writing. Those who can best perform that function will carry it out."

There are at least two significant points in this quotation with respect to the conduct of V.A. hospital recreation programs. The first has to do with philosophy, the second with procedure. In the first instance, it has never been the purpose of the V.A. program to provide recreation activities simply to occupy patients at times when they have nothing better to do. The writer considers it important to mention this because of the misconception which still persists in some quarters as to the basic difference in philosophy between that of the wartime army and air force special services programs, which were almost solely leisure-time activities for well individuals, and that of the peacetime V.A. Special Services programs, which are conducted for individuals who are ill. Both programs, of course, were and are purposeful; the fundamental difference in purpose, is surely understood by all who are engaged in the conduct of recreation activities for mentally-ill people.

The second point which Dr. Menninger makes pertains to the doctor's stating his prescription in writing. Within the V.A., all patients participating in active sports must be cleared in writing on a form which has been standardized for the purpose. Many patients have music activities prescribed in writing. All patients are cleared in writing for all tours, excursions, trips to ball games, and other off-station activities. In other scheduled activities, especially where patients participate in large groups, prescriptions or clearances are not written for individual patients but for the groups. The writer wishes to remind readers that he is referring here only to recreation activities, and that patients who cannot safely and beneficially participate with others in group activity are treated on individual prescription by members of the physical medicine and rehabilitation service.

Now for a word about those responsible for the conduct of the V.A. hospital recreation programs. There is today a small but trained corps of specialists in the central office in Washington who are responsible for developing policies, standards, and programs in such areas as adapted sports, music, entertainment and

radio, motion pictures, hobbies, and other social recreation activities. Depending upon the size and type of hospital, there are on the job, in each hospital, a chief of recreation and staff including technicians in each of the areas just mentioned. All these people are professionally trained for the duties required of them. This training has varied with the type of technician involved. Some have had many years experience in V.A. and other hospitals under competent medical direction. Others have had valuable experience in service hospitals during World War II.

For all, continuous in-service training is stressed. This in-service training has taken the form of recreation and sports training courses, which have been conducted for all hospital recreation chiefs at such locations as Lyons, N. J., Swannanoa, N. C., Memphis, Tenn., Los Angeles and San Francisco, Cal., Downey, Ill., and Topeka, Kan. Several of the V.A. hospital personnel in the east have attended the two hospital recreation workshops conducted by New York University in co-operation with the V.A.

In-service training has also been accomplished through informational material disseminated to the hospitals from the central office, through professional staff meetings and orientation and instruction classes at hospitals, and through a limited number of interhospital visits. Until recently some training was accomplished by technical recreation supervisors visiting field stations for evaluation purposes. Short training seminars have been conducted for motion picture projectionists and are planned in other specialties such as adapted sports, music and radio. In the area of dramatics, the American Theater Wing has for more than two years provided, in the person of Mrs. Carolin Witherspoon, excellent training for selected hospital recreation technicians. Mrs. Witherspoon has conducted workshops in self-entertainment at 11 V.A. mental hospitals, having at the same time established theater production groups and assisted in developing liaison between hospital personnel and community and university drama groups showing interest in such activities. In most instances these workshop activities have been of approximately six weeks duration.

In addition to the professional employees in the recreation program at hospitals, there are literally thousands of volunteers who contribute materially to the conduct of recreation activities. In fact, in January of this year an estimated 15,000 volunteers contributed approximately 50,000 hours to the conduct of recreation

activities in the V.A. mental hospitals alone. Assurance can be given here that all volunteers in the program are required to have proper orientation and indoctrination in the hospital program before contributing voluntary service. Further, while on duty, they must receive direction and close supervision by recreation staff personnel, receiving on-the-job instruction where indicated.

At many hospitals, students from nearby colleges assist in the conduct of activities. This is especially true in the areas of adapted sports, music, dramatics, and social activities, although college students have assisted in the conduct of other selected recreation activities at several V.A. hospitals.

The writer recently visited the new hospital at Montrose, N. Y., which is to open shortly. This was, of course, an extreme pleasure, for the plant at Montrose leaves little to be desired in the way of indoor recreation and sports facilities for psychiatric patients. Unfortunately, the other 33 V.A. mental hospitals now in operation cannot boast this fine a physical plant. All do have theaters, auditoriums, or comparable space which can be used for showing 35 mm. motion pictures and for presenting shows and entertainments. Often, the recreation hall or theater serves the multiple purpose of church, gymnasium and theater. Approximately one-third of the hospitals have gymnasia and golf courses; more than two-thirds have bowling alleys and swimming pools available for recreational aquatic activities; all have outdoor space adequate for such sports as baseball. Most of the mental hospitals have single-channel radio systems with a very few having either no radio system at all or having multi-channel systems. Twelve hospitals have television sets which are used for the most part in dayrooms and recreation halls.

In considering activities selected for their representation of the total recreation program in the V.A. mental hospitals, it should be kept in mind that the widest variety of activities possible, on and off the ward and off the station, are provided seven days a week to meet patients' needs as expressed by their physicians; that all activities are planned with and cleared by appropriate medical authority; and, that in selecting activities, it is recognized that what is done *by* the patient is normally far more important than what is done *for* the patient.

Each week, three 35 mm. motion picture programs, consisting of pre-release or current feature pictures, one or more short sub-

jects and up-to-date news reels, are made available to all V.A. hospitals through centralized booking by the motion picture division in Washington. In addition, there are made available each week two current 16 mm. features, short subjects, and a news reel for ward and dayroom showings. Each film is reviewed by a board of motion picture review, located in New York City, in order to assure not only its entertainment value but also to determine whether there are medical contraindications for the showing. If the board has any doubt as to the suitability of the picture in terms of the criteria established by the department of medicine and surgery, a panel of psychiatrists in the New York regional office clinic makes the final decision concerning its distribution.

To date medical authorities from eight hospitals have requested that the V.A. office in Washington book short-subject 16 mm. films for use in connection with shock treatments at their hospitals. At Fort Custer, Mich., for example, such films for more than a year have been used alternately with group singing, games and record playing prior to electric shock treatments.

One of the doctors at Fort Custer has this to say about the therapeutic value of movies for patients awaiting shock treatment:

"The therapeutic value of movies in connection with electroshock therapy is that they alleviate the tension, anxiety, and apprehension of patients awaiting their turn for treatment. We think outdoor sports films are particularly valuable, especially those featuring golf, football, baseball, skiing and skating, swimming, horseback riding, and fishing. Boxing and wrestling, which involve the combat element, are better omitted, since they sometimes pitch the patient to a high degree of excitement. We would like to have movies shown each time shock therapy is given."

Music is an important aspect of the recreation program in all V.A. mental hospitals. In general the program encompasses active participation on the part of patients in orchestras, drum and bugle corps, rhythm bands, glee clubs, choirs and barbershop quartets. Instrumental and vocal music instruction is provided when competent instructors are available. Patients also enjoy concerts and recitals and participate in music listening and appreciation activities.

Roughly, two-thirds of the mental hospitals have music specialists. At those hospitals not having specialists, however, other recreation staff personnel, if they themselves are not qualified, ob-

tain qualified volunteer assistance from the community, including nearby college students; a significantly large contribution to music leadership continues to stem from the patients themselves.

Several national organizations, such as the National Federation of Music Clubs and the Music Educators National Conference, make music instruction and ward entertainment, among other things, available to hospitals through their local representatives. The Society for the Preservation and Encouragement of Barber Shop Quartet Singing in America, Inc., encourages local groups to entertain at hospitals and has twice conducted a V.A. barber shop contest on a national scale, by judging recordings made of entering team performances. The Music Performance Trust Fund makes it possible for many hospitals to obtain additional musical entertainment through local American Federation of Musicians representatives. The Artists Veterans Hospital Program, through the Musicians Emergency Fund, Inc., has for three years provided top concert artists, particularly to isolated stations, also at no cost to the government. Artists on the list number more than 300 and include such top performers as Jose Iturbi, Gladys Swarthout, and Benny Goodman. On its tours, the Metropolitan Opera Company each year provides many of its artists for hospital performances.

In a recent one-time report from hospitals it was learned that 10 hospitals were conducting rhythm band activities, these primarily for regressed patients. A rhythm band, as many know, is a group of persons performing on percussive pre-band instruments, such as drums, tambourines, triangles, cymbals, castanets, wood blocks, and the like, as rhythm-accompaniment to musical recordings, or musical selections performed by instrumentalists actually present. Excellent success was reported in the employment of this medium and respondents were enthusiastic in their reports that participation by regressed patients in such activities had, along with other therapeutic activities, helped to improve co-ordination, hygienic habits, had fostered better co-operation with other patients and members of the hospital staff, and had developed a better sense of responsibility and broadened interests.

To quote specifically a ward surgeon from the V.A. hospital at Gulfport, where rhythm band activities have been conducted now for more than three years:

". . . [Since] the rhythm band has been conducted, five times a week, there has been in general a feeling of better spirits among the patients. A great many of our patients are schizophrenics of long standing, and any activity that gets them to participate as a group is certainly beneficial. Approximately 35 per cent of them have participated and are participating, and while we cannot offer definite figures at the present time, there is no question that they do respond more than they did previously."

First and foremost in our so-called entertainment program are those auditorium, recreation hall, and ward shows in which the patients themselves participate. The extent to which the patient engages in these activities is determined by the extent of dramatic leadership available at the individual hospital, types of patients, facilities, and community resources. In this respect, the American Theater Wing and colleges and universities affiliated with the American Educational Theater Association have contributed materially to this program. The formation of the hospital Theater Production Groups has been "getting a good play," particularly in the mental hospitals. One psychiatrist has stated that, "Hospital dramatic activities are particularly important, inasmuch as they appeal to the *well* part of the patient." In very few other activities, are there such widely divergent opportunities for persons of varied abilities to use existing and potential skills and talents for individual and group expression.

This use of the drama was exhibited some time ago when a full-scale production of *Showboat* at the V. A. hospital in Augusta, Ga., for which patients themselves designed, built and painted all scenery, worked out electrical effects, and made an original adaptation of Edna Ferber's book for their script, brought forth these comments from the chief of the professional service:

"In the period of slightly more than two years that I have been connected with this hospital, there has never been interest in any recreational activity for patients that was comparable to their own production, *Showboat*. . . ." He goes on to say that such productions should be increased, as it appears that the patients who do not actually participate as members of the cast are able to feel a sense of participation through their associations with members of the cast who do participate.

The writer would like to add that it is reported that for this production, the entire stage was redone and the rehearsals were

directed by a patient who, during the entire time the show was in production, was undergoing a series of electric shock treatments.

In its efforts to entertain patients, the V.A. has the services of the Veterans Hospital Camp Shows which was organized in January 1948 to replace the wartime U.S.O. Camp Shows. V.H.C.S. provides hospitals with professional theater and ward shows which are booked on a closely knit, nation-wide circuit to visit each hospital on the circuit every three weeks. V.H.C.S. also provides hospitals with outstanding portrait and commercial artists.

To assist in the preparation of locally-produced hospital radio programs, the V.A. purchases Armed Forces Radio Service transcriptions from the information and education division of the Department of Defense. These non-commercial transcriptions, sent to most hospitals each week, are so designed as to present complete 30-minute musical, general interest, and sports programs. Leading celebrities, artists, orchestras and conductors give their services to this program without compensation.

Because of the rapid development within the industry itself, and because of excessively high maintenance and service costs, the V.A. has not as yet purchased any television receivers for hospitals, and has placed certain limitations on television sets donated to the hospitals. Studies have been under way for some time to determine the place of television in the hospital recreation program and to determine necessary controls.

Hobbies, of course, are widely recognized as a valuable hospital pursuit. Among these are collections of a wide variety of objects, participation in which leads many times to the formation of clubs where patients with common interests are banded together. Many types of clubs are now to be found in V.A. hospitals among which sports clubs, stamp clubs, press clubs, chess clubs, and garden clubs are the most popular. Seventy per cent of the V.A. mental hospitals report that they have organized clubs, meeting regularly.

Tours and excursions are regularly scheduled to insure for the patients a measure of participation in community life. Visits to historical spots, scenic locations, industrial plants, museums, and other places take the medically-cleared, ambulatory patient out of the hospital environment and into society. A moderate number of fishing parties, hikes, picnics and bicycling groups are also scheduled.

One important feature of the program at more than 80 per cent of the V.A. mental hospitals is the hospital newspaper. The newspaper is truly a patient activity. Patients contribute by reporting, editing, illustrating, publishing, assembling, and distributing their paper, as well as by reading and discussing it. The hospital editorial board, on which administrative and medical interests are represented, serves to keep the publication in line with established hospital policy. The publication of the newspaper is at many hospitals a principal activity of the patients' press club.

Through the contributions of the organization, Stamps for the Wounded, and others, such as American Women's Voluntary Service, patients are provided with subscriptions to stamp magazines, regular shipments of stamps, albums and catalogues, and the voluntary services of stamp collectors and experts near each hospital. Eighteen of the veterans' mental hospitals report active stamp clubs.

The third annual Hospitalized Veterans Writing Project was sponsored last year by a group of publishers in Chicago. This national contest was participated in by approximately 600 veterans, hospitalized in V.A. and service hospitals. Three prizes and three honorable mentions were awarded in each of 10 areas of writing, such as essays and poetry. It seems significant to be able to report that 26 patients representing 17 V.A. mental hospitals either won prizes or honorable mentions.

One of the most successful club activities which has come to the writer's attention is the Patients' Garden Club at the hospital at Northport. This club has, to date, promoted three annual flower shows, at which patients, hospital personnel and the public have been invited to exhibit in competition and to attend the show. The club is a member club in the Men's Garden Clubs of America; and, in the 1950 New York Flower Show, it won a silver medal certificate for its exhibit, "Woodland Scene."

At American Lake, Wash., success has been experienced with the development of a Toastmaster's Club about which patients and the recreation staff, as well as medical personnel, are quite enthusiastic. The club was organized through the co-operation of the Red Cross field director and the area governor of Toastmasters. Olympia Club members attend the hospital club meetings, provide the "Best Speaker" cup, the gavel, and speech information pamphlets. On occasion they also invite hospital club members to

their own dinner meetings, where the patients participate in the table topic and other phases of the program. Both open and closed-ward patients participate in this activity in which psychiatric attendants assist.

Toastmaster Club meetings are held each Monday evening. After the reading of the minutes and the dispensing of old and new business, each man present participates in a table topic by presenting a one-minute impromptu speech. Following this, three five-minute prepared speeches are given on topics chosen by the speakers. The toastmaster calls upon an evaluator, also a patient, to give the proverbial "pat on the back and kick in the pants" as one patient describes it in his constructive evaluation of the speeches. By closed ballot, patients select the winning speaker; and the patient who has held the cup for the past week turns it over to the new champion. Meetings are of less than two hours duration, and each has been attended by from 15 to 20 patients. The therapeutic potential in an activity of this nature would appear to be considerable.

Dancing is another very popular activity for psychiatric patients in most of the veterans' hospitals; the writer, personally, considers it to be one of their best activities for resocialization purposes. To quote from a report from the Roseburg, Ore., V.A. hospital:

"Dances have always been popular with the patients . . . but interest was being lost in 'just dances'; so a stimulus was provided in making each dance entirely different from the one preceding by planning an individual theme for each dance. . . . If a harvest dance, for instance, is decided upon, a hill-billy orchestra is procured for that evening and the recreation hall is decorated with cornstalks, pumpkins, etc., and the harvest motif is carried out. . . . The committee that does the decorating is made up of volunteer workers and patients. It has been noted that the time and effort put forth in selecting a theme for the dance and in decorating have more than doubled the attendance at the dances." Incidentally, volunteer organizations also assume responsibility for rounding up hostesses which, the recreation staff at Roseburg recommends, should number approximately two-thirds of the male patients present.

By the use of students majoring in physical education and recreation at the local teachers college—who assist in calling and in-

structing—the hospital at St. Cloud, Minn., has had excellent response from patients in the square dances promoted twice each month. And, at the hospital in Waco, Texas, the regular Thursday night social and dance is one of the most eagerly-anticipated activities in the recreation program conducted for post-lobotomy patients. This effective re-educational activity for post-lobotomy patients has been in operation at Waco now for more than a year.

Prior to initiation of the program, all personnel who were to work with the lobotomy patients were brought together to share in the planning. Necessary indoctrination and training of staff members were carried on through the use of lectures and training films.

From the beginning of the post-lobotomy project, a flexible schedule of activities was established, so that, as the patients progressed, provision could be made for activities of a more varied and complex nature. When the project began, only two patients were involved. Since that time, a steadily-increasing number have been participating. The program first consisted of short-subject movies, games such as ring toss, bean bag, checkers, and the like, and sports. However, many other activities, including trips off the post and dancing, have been added.

To combat the apathy which follows the lobotomy operation, patients are encouraged to keep as active as possible. They have been instructed and encouraged to exercise the male prerogative of asking the girls to dance rather than having the girls ask them. They have also been taught accepted ballroom courtesies and, as a result, their conversational ability is reported to have been enhanced. Many patients have thus been substantially aided in the retraining and re-forming of their habit patterns and in re-establishing adequate contact with their environment.

Perhaps nowhere in America, in fact in the world, is more sustained interest shown in the field of sports than in our V.A. mental hospitals. Over the past four years, roughly 50 per cent (or one out of every two) of the patients have participated actively in sports each week. Many more patients, of course, have been spectators at sports events conducted on and off the station. Others have literally stood in line to get the weekly issue of *The Sporting News* which has for the past several years been donated in very liberal quantities to patients in all of the V.A. hospitals by the Bowlers Victory Legion. And still others are members of sports

clubs formed among patients to promote interest and activity in such sports as baseball, bait-casting, golf, and the like.

In the adapted sports program, as in other phases of recreation, emphasis is placed on active participation, and on off-station trips where supervisory personnel are available. The daily scheduled activity periods, where patients participate in units of wards, buildings, or sections, constitute the bulk of the adapted sports program for psychiatric patients at all hospitals. Classes are conducted out of doors when the weather permits, but in inclement weather it is necessary to hold them on the wards, in corridors, dayrooms, auditoriums, and other makeshift locations at the hospitals with inadequate indoor facilities. In some instances, a limited number of patients are taken off the station to use available facilities in the community.

At the Bedford, Mass., hospital, there is a good example of the group approach in the application of the adapted sports program. Here patients from six buildings have been divided into from three to six groups for each building with two technicians assigned to each group during activity periods. Periods are one hour in duration and are scheduled from 8:30 in the morning until 3:30 in the afternoon. The number of patients in each group varies from 10 to 25. Activities are categorized according to complexity, intensity, and other pertinent factors, and their employment with groups of patients is arranged accordingly. Hyperactive patients are scheduled for from five to six periods a week; less disturbed patients from three to five periods, depending upon the several factors making participation possible.

At Gulfport, Miss., the sports program is also conducted six days each week, on a prescription basis for all patients except for priviliged patients who participate voluntarily. Here groups vary in size from 25 to 100 with the general policy being not to exceed the ratio of 20 patients to a sports technician. Patients from the disturbed wards, as well as those from the acute-intensive treatment service, are cleared medically monthly, while those from the less disturbed and continued treatment wards are cleared bimonthly. The psychiatric service has prescribed 14 hours a week of sports activities for two wards of disturbed patients. In contrast to the intensive and continued participation emphasized for the very disturbed patients, modified sports and games are used with chronic psychotic patients for whom 10 hours a week of ac-

tivity have been prescribed. For most of the other patients in the hospital, sports activities are prescribed for five to six hours a week. It should be explained here that Gulfport has good year-around weather and fenced-in outdoor areas; otherwise sports facilities are negligible.

At one time or another we have all experienced difficulty in getting withdrawn patients to participate in activity. At the hospital in Northampton, Mass., as well as in several other hospitals, it has been found that the use of music accompaniment to marching, calisthenics and other drills has met with considerable success in inciting interest among patients. A record player is taken to the ward at the scheduled period and such selections as marching songs, polkas, and other lively numbers are played alternately. On one ward containing World War I patients, the institution of music with exercise met some time ago with almost immediate response, and participation steadily increased from less than 50 per cent at the outset to eventual 100 per cent participation of those on the ward who were cleared for activity.

At Waco, Texas, in order to assure participation, patients from a given building assemble in a circle at a routine assembly point and immediately proceed to engage in calisthenics for approximately 20 minutes. Patients then have a selection of several sports activities. The better patients are encouraged to select the more complex activities while those in a lesser state of physical and mental health are encouraged to select games of lower organization. Patients not desiring to play any of the nine sports and games offered are required to remain in the circle and participate in passing the medicine ball and other fundamental exercises.

Of course, no sports program would be complete without competition. And this competition in the V.A. does, on occasion, extend beyond the confines of individual hospitals. For example, the hospitals at Perry Point, Md., Coatesville, Pa., and Lyons, N. J., have for three years conducted a tri-hospital athletic meet which comprises competition in golf, tennis, softball, swimming and horseshoe pitching. Each year a hospital takes its turn in acting as host. These sports events are those in which several services in the hospital and many voluntary service groups participate; and, at host hospitals, patients look forward to the competitions for weeks. At all participating hospitals, of course, many more patients actually compete in qualifying rounds than appear in the

meets themselves. The manager at Perry Point, where the meet was held last year, stated, in his greetings to visitors:

"The Tri-State Hospital Athletic Meet has been a tradition among our three hospitals and I am sure that the friendly spirit of competition among the patients of the respective hospitals has been a factor in the recovery of many of the patient participants in the past. . . ."

At Lyons, N. J., an annual Eastern V.A. Hospitals Patients' Golf Championship has also been conducted for the past three years. This is a one-day affair in co-operation with the New Jersey Professional Golfers' Association and has included not only 18-hole medal play but putting and driving contests as well. Twenty-five entries, representing many more golfers from six V.A. hospitals, competed last year.

It should be recognized here that the interhospital sports events just described have originated at the hospital level and not in Washington. However, the Washington office has for four years promoted a competitive event, the V.A. Bowling Team Championships for Ambulatory and Wheelchair Patients. These contests have been conducted on a telegraphic basis, cover a one-month competitive period, and have been participated in by more than 30 different hospitals during each of the past three years. In the 10-pin ambulatory division of the tourney, teams from mental hospitals have been winners every year. Although this year's winners have not yet been announced, unofficial figures indicate that Canandaigua will regain the national championship it held two years ago and lost to Knoxville, Iowa, last year. Incidentally, the writer understands that the team representing Canandaigua is participating this year in the New York State Bowling Meet to be held at Syracuse. If this is true, it will be the fourth consecutive year the hospital has been represented in and taken home trophies from the New York State Bowling Meet.

At a meeting of the American Neurological Association held in New York in May 1898, Irving C. Rosse, a medical doctor, had this to say about the value of golf for mental patients:

"But it is pre-eminently in functional nervous disease that our great Anglo-Saxon game is to be recommended, both as prophylactic and curative. No exercise or recreation is better for the mentally overworked, the hysterical, the melancholic; none helps to preserve the concerted action of eye, brain, and muscle known

as the psychological moment; none, perhaps, with the exception of swimming, gives one so good an appetite; there is not a more sovereign remedy for dyspepsia, and as to insomnia, such a thing scarcely exists among the devotees of golf."

Golf, of course, is a popular activity at those hospitals having facilities. In this respect, the V.A. is very fortunate to be getting the support of the American Women's Voluntary Services, more specifically that of Mrs. Helen Lengfeld, its national vice president, in developing swing clubs at several hospitals. Swing club activities, first developed by the A.W.V.S. at the hospital in Palo Alto, Calif., enlist the co-operation of the Professional Golfers' Association, the Golf Course Superintendents' Association, and others, in providing and maintaining golf facilities and rendering assistance in introducing golf activities in those hospitals expressing a need for them. At Palo Alto, the A.W.V.S. has already been the driving force back of constructing and maintaining a nine-hole pitch and putt course, plus additional putting greens, and of converting a quonset hut into a club house. For more than two years, this organization has guaranteed regularly scheduled instruction by women volunteers from nearby clubs.

Before closing, there should be a word about swimming. Aquatic activities have for years been recognized by V.A. psychiatrists as having definite therapeutic value, not only with a large proportion of acute-intensive-treatment patients but with continued-treatment patients as well. During the fiscal year 1948, 25 of the 33 V.A. mental hospitals conducted aquatic exercises and recreational therapy to the limit of available facilities. Unfortunately, the very small pools which are now to be found in most of these hospitals are almost totally inadequate to accomplish maximum physical, psychological and social benefits for more than a very small part of the large patient population. A small pool does not provide adequate space for vigorous exercises and games, and it is almost totally devoid of the necessary motivating influences which are essential factors in the care of psychiatric patients.

The writer has attempted to give an over-all view of the V.A. hospital recreation program for psychiatric patients by presenting what he considers to be pertinent aspects of the philosophy underlying the program and the techniques in its execution; he has also described activities selected for their representativeness of total program. He would not want to close, however, without

giving assurance that those in the V.A. do not look upon this program as being peculiar to V.A. hospitals or as something new in mental hospitals. Certainly, the conduct of this institute for state hospital recreation personnel, with its very fine reports, is evidence that recreation is not confined to V.A. hospitals. And, as to recreation being a new program in mental hospitals, permit a quotation from Ira L. and H. Allen Smith's popular sports book recently published by Doubleday entitled, *Low and Inside*:

"The two compilers of this compendium regret that they were unable to attend a series of baseball games at Middletown, New York, during the season of 1889. That was the season in which the team made up of patients from the New York State Homeopathic Hospital for the Insane won 11 games, tied one, and lost only three.

"The medical superintendent of the hospital, Dr. Selden H. Talcott, reported at the conclusion of the season that playing baseball was a fine thing for his patients. Said Dr. Talcott:

" 'The beneficial effects of the national game upon those whose minds have been depressed or disturbed are very marked. The patients in whom it hitherto has been impossible to arouse a healthy interest in anything seem to awaken and become brighter at the sharp crack of the base hit.' "

One may be assured that V.A. psychiatrists are repeating similar observations today with respect to many of their hospital activities, as participation in such activities is accelerated and the variety of activities is broadened. All, of course, realize that much research still remains to be done to discover just how recreation can better serve the purposes of modern medicine and hospital administration.

Recreation Service
Office of Special Services
Veterans Administration
Washington, D. C.

THE DAY-EVENING SOCIO-RECREATIONAL PROGRAM FOR A MENTAL HOSPITAL*

Actual Practice at Rockland State Hospital

BY MAUREEN McSORLEY

In discussing the day-evening socio-recreational program, it is not the purpose here simply to speak of planned hourly schedules and a daily operational program. Rather, it is the motivation behind this extensive program that needs clarification. Some definition of the fundamental working parts of the program will be made, but, in general, the needs of any area prescribe the details.

In setting up the day-evening program with its overlapping social functions, one general guide became self-evident. Socialized recreation, properly directed, gave the patient approved outlets for his trends, or took him completely from them for a pleasurable space of time. It established a path from fantasy and repression to reality and expression under relatively free conditions. Once this path is clearly defined by habitual connection in the patient's mind, he may traverse it at any time as a relief from anxieties or aggressions, since even the recollection of these social activities and leisure-time pursuits will tend to wean him away from unreality. This beacon may well light the way for the recreation worker when other reasons for endeavor are obscure.

There are, at the present time, nine overlapping schedules in operation in the Rockland (N. Y.) State Hospital recreation department, these are in operation from 8:30 in the morning until 10:00 at night, and have been arranged to cover 70 per cent of the adult patient population with active and passive recreation. The adolescent wards and the children's group are reached as wholes with specially prepared programs suitable to their needs. Forms of recreation include such ward activities as sings, movies, games; music and marching, folk dancing; gym activities such as games, sports, and exercises; playground, court, field, and courtyard tournaments in sports; picnic, field day, and carnival activities; auditorium programs inclusive of parties; dramatics, shows and concerts; and shop and gym socials. The decisive factors in choice are the needs of the patients worked with, as placed against the

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seasonal background within the psychiatric medical-treatment panorama.

Despite the rapid growth in mental institutions of the leisure-time programs meant primarily for the mental patient, recreation is still largely regimented and bound by old-time procedures and goals. Lacking, are many of the creative techniques which would give lasting carry-over effects relating specifically to what the patient takes back to the ward, or on out of the hospital or institution into community life. The assumption is that these creative techniques can have a beneficial carry-over effect upon the patient exposed to them in the recreational programs, and that they will tend to make him able to adjust better to a life in which he should have an integral place—a place which his lack of confidence and personal insecurity have so far denied him.

It is no longer enough to ensure release of energies through regular exercise, or calisthenics. The emphasis moves over to a more vital justification for activity and that is: joy in achievement combined with increasing growth in mental, emotional and social spheres. Re-education of the mental patient on the social plane is not without the usual handicaps and problems met elsewhere in group activities conducted by group leaders, community center workers, 'teen-age-club leaders, etc., but the hospital problem incorporates exaggerated behavior patterns which must be even more closely observed, judged, and channelled—or perhaps even cauterized.

There is no ready solution, or formula, to many of these complex behavior problems unless one can overcome the handicap of untrained, unprofessional leadership. However, having, on the one hand, the patients' needs and desires, and on the other, the deep desire to satisfy those needs creatively, there must be prepared a connecting road of supervision, in-training classes, and informative orientation periods for the new recreation leaders. This sphere of orientation and inculcation of idealisms should expand, wherever possible, to include other personnel touching upon or reaching the same patients, so that there will be a mutual understanding of each other's methods and plans. Where there is continued conflict between two or more lines of therapy, or service, the patient is likely to be the sufferer, since he views with additional uncertainty an environment that asks him to choose among

a multitude of benefits and does not really allow him a free choice of the one thing he wants.

This is even more observable within the recreational sphere itself where workers vie with each other competitively in the same, or similar, activity, instead of operating as phases of the total recreation program. Or, what is worse, workers tie certain patients to them emotionally so that these patients cannot voluntarily and easily move in other parts of the recreation picture. This binder, perhaps unconsciously applied by the leader, can operate only on a deleterious plane, since it limits the expressiveness of the patient and segments his interest.

In spite of the handicaps of a non-selective housing of patients —diagnostically speaking—the recreation programs are slowly becoming more and more designed for their particular participants, whether active or passive. The relative needs of the afternoon-evening program as contrasted with the morning-afternoon one, are beginning to emphasize the resocialization aims of recreation. It has been shown by experiment and practice in most of the recreational fields that the hours after 1:00 p. m. are best suited to the re-creative functions of play and dance. This has been found true at Rockland State Hospital also, so that most of the formal exercise classes are carried on in the morning periods; play and sports in the afternoons; and social activities and entertainments during the evenings.

Adapted sports and games have been shown to contribute greater benefit to the total person than straight calisthenics, emphasizing that muscle tonus depends not only upon developments of fiber through exercise but upon mental attitude, which affects the secretions of glands feeding these muscle fibers. And so, even the exercises must be made appealing, graceful, or provocative. They must be a means to an end rather than an end in themselves.

The day-evening program was started at Rockland in response to pleas from the worker patients for some form of recreation following their work days, and because the daily work therapy program carried on in the hospital industries is invaluable to the patients and could not be broken into too frequently.

The program opened three years ago, with four nights a week in selected areas for specialized activities. One evening was devoted to folk and square dancing in the men's gymnasium. A second evening was devoted to social dancing and orientation activities

in the male reception service. A third was given over to novelty games and folk and square dances on the insulin shock treatment wards. On a fourth evening in the large auditorium, there were basketball, volleyball, badminton, table tennis, and other table games. These evenings included men and women patients and occupied the hours from 7:00 to 10:00. The areas were originally selected by the senior director in conference with the doctors in charge of the services involved, since it was hoped that in these areas certain high values in re-socialization would be achieved more quickly and naturally through these programs.

When the programs opened, three volunteer workers were assisting, and employee participation was encouraged. These volunteers were particularly skilled in folk and square dancing and created an active nucleus of liking for this type of dance among the patient groups. The patients had, previously, been averse to folk and square dances, since most of them came from the New York City metropolitan area. One of these volunteers eventually joined the recreation department as a worker and carried the program directly into the wards for regressed patients, where it is still in operation. In addition, this specialist taught the other recreation personnel the basic folk and square dance techniques during the weekly in-training periods; and, in this way, the dance program was expanded into many more ward areas.

A little later in the first year, a fifth evening program was started for the shut-ins in the twin buildings that house the aged and infirm patients. This program was begun with a basic plan of community singing and projected song slides, and the presentation of some patient talent, chosen from other areas. Recently, within the last six months, this program has expanded to include social dancing, for which the patients indicated a desire. Generally, these social evenings have expanded in the direction of patient interest, with control of constructive channelling in the hands of the recreational instructor and supervised by a recreation instructor-in-charge and building personnel.

It was found, in due time, that the use of volunteer workers created certain mechanical and social difficulties, which mitigated against the beneficial effects; and the programs were then continued in operation with recreation workers in charge. Finally, by installing a work pattern, whereby each recreation instructor

worked one evening a week, it was possible to expand the evening program into several new areas.

At the present time, there are eight of these evening programs operating on a weekly schedule, and reaching into eight different areas. Additional needs have been reported in sections not yet supplied by these programs, and it has become increasingly evident that the period between supper and bedtime is a fallow field for the recreationalist. The emphasis in these programs is on social activities, dancing and the development of approved social behavior. Refreshments are served only occasionally in those areas where patients are extremely mobile, and a little more frequently in those where patients seldom leave their buildings.

Specially designed programs for this leisure time may more readily prepare the patient for life in the community by presenting natural patterns of social approach and response within the institutional set-up. Careful observation of patient behavior, and quiet, impartial suggestion to the patient during the programs will result, one hopes, in raising the general cultural level of the entire group. Recreational therapy involves the reiterative inculcation of good health and social habits which result in a patient's good adjustment to the social pattern within or without the institution. And conversely, a recreation leader, or therapist, is an individual who is capable of administering this therapy through having a definite knowledge of techniques, standards, ethics and materials in his field of endeavor, and who is also capable of projecting that knowledge by suggestion, induction, education, visualization and demonstration. An intuitive, receptive personality, combined with a real liking for people, is an invaluable asset. One likes to feel that those already in the field are in possession of these attributes, and it is of particular concern to see that new leaders coming in should possess a goodly percentage of these factors.

The musical aspects of the recreational program are the living, essential, connecting threads of most of the programs. A group of workers with music potentials have been assigned specifically to this area. Their work has generally apportioned itself in five loosely-defined sections. The first is concerned with community singing on the wards, or in specific groupings. The second comprises work with choirs, and choral groups, of which some part is, necessarily, individualized training. The third includes the work

with rhythm bands. The fourth relates to treatment; and here music is directed toward certain hoped-for effects and is under the guidance of the doctor in charge of treatment. The fifth section concerns itself with the discovery and training of talent for parties, entertainments and shows.

This, as can be seen, gives the music section a wide field of endeavor—the scope limited only by mechanical and functional lacks. To implement this program, various types of equipment have been needed. Seventy-eight and 45-rpm record players have been made up at the hospital. Several portable and mobile units for use on selected wards and dining rooms have been built to the specification of the music personnel. This has been found more desirable than the centralized system with record player in the building supervisor's office and outlets to each ward. The centralized system offers little opportunity for directed programs and for observation of interest and disinterest. The rolling cart, or portable unit with plug-in, permits of conversation with the patients in the area concerning the music even though it places some limitation upon the numbers receiving the program in any one area.

It has been found, generally, that the centralized radio-phonograph set-ups at Rockland were provocative to mischief on the part of the patients, since they were only intermittently monitored, were at most times too muted to be audible; and at other times were too noisy for comfort. At all times, the music from these systems was too continuous to grasp and hold the attention of the patients. The use of the portable units permits patients to request music for future periods and allows for a follow-up in the suggestion of reading matter relative to music, which the patient may obtain from the hospital library.

In collaboration with this program, 35 mm. slide projectors of the Argus type were bought, so that song slides could be used for community singing in place of the easily destroyed song sheets. The major difficulty here was to keep up with the newer songs. The solution finally, was to place on slides only those songs which gave evidence of being classics and of perpetuating themselves, while using song sheets for special occasions.

Rhythm band instruments were bought, or made, as occasion required, the majority being constructed at the hospital. Some effort was made by demonstration on a blackboard, to teach the

rhythm band group to read the musical scale and notes. The blackboards were prepared by the girls in the music section, from oblongs of plaster-board salvaged from reconstruction around the hospital, and were lacquered to a fine matted black which takes to chalk very nicely. These blackboards are lighter for their size, and therefore more portable, than slate boards would be. Arrangements for rhythm band musical selections were worked out, with attention to the instruments on hand or available, and these arrangements were practised before the patient orchestra demonstrated in the auditorium. The rhythm band program has always included one selection for which the patients prepared their own arrangements, based on what they had learned.

Pianos and other instruments for individual practice and instruction were bought or donated. Records for music appreciation, for folk and square dancing, and for social dancing were obtained similarly.

There is available for use with the choirs and choral groups, and for auditorium programs, an excellent electric Hammond organ, and the hospital is fortunate in having several persons who can play it as the need arises.

Additional equipment has created the need for additional service to keep it in good repair. There has been increased need for proper use of these delicate instruments, plus the training of personnel in the proper care of each item, in order to use it to its fullest extent. These things are mentioned in passing for those persons interested in expanding their program in the music area.

It is necessary on the night programs for the recreation workers to handle and move the equipment needed, whether it is a record player and records, party paraphernalia such as plates, cups, etc., or game equipment.

This is true also of those afternoon programs concerned with recorded music, party preparations, picnic arrangements, folk and square dance programs, or ward movies. The equipment has been made as mobile as possible, and the use of state cars has been allowed whenever available.

The afternoon party programs, which reach into many specialized areas such as occupational therapy, the topectomy service, and the adolescent ward, have completely organized party frameworks which two recreationists can manage, with patient groups numbering up to a hundred or slightly more. The larger the pa-

tient group attending the party or picnic, the greater is the need for additional workers. The party usually begins with introductory music to which the patients enter, then seat themselves and become comfortable. This is followed by a social dance. The talent program is presented in the smoking and intermission period. This is followed by a social dance, then party games and another social dance. Following this, there is more social dancing interspersed with square dancing. Usually, by this time, the refreshments are waiting to be served, and music is again played for this interlude. The afternoon is finished with social dancing. This type of program fully occupies the period from 1:30 to 4:30 p. m., with no lags even in the slowest groups.

A similar arrangement has been made for the picnic sessions which start during the middle of May and continue twice a week throughout the summer to the middle of September. Naturally, because of the terrain there is less social dancing and more folk dances and square dances. And there is attention to outdoor games such as volleyball, horseshoes, and croquet in place of the party games played during the indoor season.

A minimum of prizes is offered for the games, and a minimum of cigarettes offered, since there is an effort to wean the patients away from the idea of attending recreation for the attendant rewards. It is gratifying to say at this time that recreation for recreation's sake is the order of the day. Evening picnics are not being held, as there is lack of proper lighting facilities. Hamburgers, frankfurters, or scrambled eggs and fried onions are prepared at the picnic grounds, as is fresh hot coffee. Oranges or apples provide the dessert. The patients are permitted to toast bread for their sandwiches if they prefer to, but the worker who is cooking for the afternoon is in constant attendance at the hearth to see that no accidents occur. A fire extinguisher is always brought to the picnic, along with the bingo game, so that either may be used if need arises. A milk can of hot water for washing sticky hands is also brought along, with a milk can of ice water for drinking purposes.

The whole night program has been somewhat handicapped by the lack of sufficient ground lights. This particular handicap has been lessened somewhat by inviting patients from several different areas so that there is one large assembled group.

One should acknowledge the motivation and assistance given this afternoon-evening program by the occupational therapy chief who gave the workers the confidence to start these experimental programs more than three years ago. His assistance ever since has been invaluable, as has been his good advice in times of stress.

Recreation in its broadest sense is a gold mine of opportunities for the social activities leader. The limitations are not finite, and usually are related directly to the capacity of the leader. This is the "re-" field; with "re-education, re-training, re-socialization, recreation, and re-newal" the slogan. Recreation workers are carbon copyists with an essential difference. They strive to improve the carbon beyond the original, the effort being not to block the patient's initiative, but to re-direct or lead it.

Rockland State Hospital
Orangeburg, N. Y.

STRESS FACTORS INVOLVED IN THE MALADJUSTMENT OF SOLDIERS

Analysis of 500 Consecutive Cases

BY EUGENE DAVIDOFF, M. D.

The purpose of this paper is to present a statistical study of various stresses and strains encountered during the military training period—factors that may lead to maladjustment or personal difficulties in basic trainees which require the help of the psychiatrist.

The observations were made on basic trainees referred to the personnel consultation of the Army Service Forces Training Center at Fort Leonard Wood during World War II.

The factors mentioned in the following were studied at the suggestion of Lt. Col. John W. Appel of the Surgeon-General's Office. Included in this list are the so-called average basic trainees, as well as the marginal group who displayed evidence of some maladjustment prior to induction.

The cases selected were all soldiers in some form of preliminary training, i. e., basic trainees and basic technical trainees. No soldiers who fell into the classification of either (a) overseas trainees or (b) redeployment trainees are included in this report. In the material, therefore, reference to "trainee" will apply only to soldiers in the basic phases of training.

The study was made early in 1945 on 500 consecutive trainees for whom follow-ups were possible. The studies on these 500 men are representative. Although brief and incomplete they contain as much information as could be obtained in the short time allotted to the study.

I. Stress Factors

The list of stress factors also records the number of cases and percentages of individuals whose referral to the psychiatrist was due to these factors. See the accompanying table.

1. Separation from family (homesickness) was found to be a stress factor in 12, or 2.6 per cent, of the cases studied. This figure is based on individuals who showed an obvious reaction to separation from family. It is, of course, supposed that many of the individuals not cited in the figures given showed manifestations of an emotional nature which were partially due to homesickness.

Table 1. Tabulation of Stress Factors

	No.	Per cent
Total cases	500	100.0
Cases showing no obvious service-incurred stress	259	51.8
Cases revealing stress factors in precipitating service-incurred disorders of a psychiatric nature	241	48.2
Cases showing only one precipitating factor	132	26.4
Cases showing two or more precipitating factors	109	21.8
Occurrence of specific factors:		
1. Homesickness	13	2.6
2. Arduousness of physical training	92	18.4
3. Arduousness of technical training	31	6.2
4. Personal domestic difficulties	38	7.6
5. Anticipation of dangers, etc.	10	2.0
6. Faulty leadership	5	1.0
7. Poor relations with the group	33	6.5
8. Ethical values of the group, etc.	9	1.8
9. Ego incentive	47	9.2
10. Relation to the medical department	14	2.8
11. Physical disability	70	14.0
12. Poor general attitudes	34	6.8

However, due to the incomplete studies and the scant time allotted, this stress factor was not brought out in many cases where it may have been a lesser contributing factor.

2. Arduousness of physical training was found to be a stress factor in 92, or 18.4 per cent, of the cases. This is the largest single stress category in the study. It is felt that this factor is the one most readily selected by the usual trainee in a discussion of his difficulty. In many cases it is so forceful and immediate that it becomes paramount, whereas perhaps more basic stress factors are not mentioned by the soldier during the interview. The arduousness of physical training is found in a great number of cases, concurrent with physical or emotional disability, and, in many instances, these other factors were responsible for the greatest amount of stress.

3. Arduousness of the "technical" aspects of training was found to be a stress factor in 31, or 6.2 per cent, of the cases studied. Included are regimentation, lack of freedom and general factors which come under loss of security and its emotional concomitants. It is believed that this stress factor is pertinent in many more cases than the figures reveal but only those are shown in whom this stress caused a direct psychic disturbance,

even though the individual may have been predisposed to such disorder.

4. Personal or domestic difficulties accounted for emotional complaints in 38, or 7.6 per cent, of the cases. In this category, the stress was usually very clean-cut and was based on a home and family problem of varying degrees of seriousness, including infidelity on the part of the wife.

5. The anticipation of danger, combat, disease or overseas service was a stress factor in 10, or 2.0 per cent, of the cases studied. In this instance, too, it is felt that fear underlies more of the psychiatric conditions than those in which it is expressed by the individual soldier being interviewed. However, it is not so closely or definitely allied in other cases to the symptoms observed as in the group included here.

6. Faulty leadership was found to be a stress factor in only five, or 1.0 per cent, of the cases. It may be that the figure is low because most trainees are loyal and are loath to discuss personalities or poor relationships with their officers. In addition, studies made on cases in an earlier period revealed a higher percentage of difficulties due to faulty leadership (about 5 per cent). Preventive efforts and a combined program of effective leadership was possibly responsible for the decrease.

7. Poor relationship with the group accounts for difficulties in 33, or 6.5 per cent, of the cases. Individuals in this category have difficulty in adjusting to group life in the army. Certain normal, but aggressive, "rugged-individualist," conceited soldiers; some normal but shy soldiers who never mingle with people in large groups and who are slow to react; individuals with specific disabilities; and soldiers with language handicaps—such as those of Mexican extraction—may have difficulty identifying with the group and thus develop an "I'm shut out" reaction. An older man placed with a group of younger men, or a rookie of 'teen age who is allocated to a group of older men or veterans may develop these feelings.

8. The reaction to ethical values of the army group, i. e., fear of being called a "goldbrick," the desire to avoid stigma and the necessity of gaining prestige was closely linked to the problem of group 7, and was found to be a factor in nine, or 1.8 per cent, of the cases studied. This is also associated with lack of stamina or allied physical handicaps.

9. Ego incentive, including the need of being appreciated and feeling important, was rarely found to be an isolated factor and was always found linked with some other stress stimulus. Reaction to lack of promotion and lack of sense of accomplishment or importance was found to be associated with poor leadership, improper assignment, ethical values of the group, home and family problems, poor identification with the group and slow reaction to change in mode of life. Forty-seven cases, or 9.4 per cent, of the soldiers gave this as one of the reasons for their difficulties.

10. Relation to the medical department was found to be a stress factor in 14, or 2.8 per cent, of the cases. While there are a greater number, the writer was careful to eliminate that group of inadequate personalities who obviously capitalized their complaints and whose accusations in regard to the medical department were based on flimsy foundations. The major complaints of the "average" soldier in regard to the dispensaries and the hospital were: the frequency of consultations without a definite decision being made; or, on the other hand, the length of time one had to wait before consultation could be had; return to full duty before a definite decision had been made; curtness and implications of gold-bricking; lack of recognition of, or time spent on, their personal or emotional problems; and lack of recognition of previous diagnoses made at other posts or by their civilian physicians so that many tests were repeated frequently with the same negative results.

11. Physical disability was found to be a stress factor in 70, or 14.0 per cent, of the cases studied. In the course of investigation, it was found that many soldiers had physical conditions of a borderline nature which existed prior to service and which accounted for much of the anxiety experienced during basic training. This was expected in view of the fact that the rigors of training exacerbated these conditions and caused tension and anxiety in the individual. In some instances these disabilities were not so great that the army could not utilize these men, but the soldier's reaction to his illness, his assignments, interest of the army itself, his general attitude, and his relationship to the medical department were factors to be considered. This was particularly true of orthopedic cases.

12. Poor general attitude was found to be a stress factor in 34, or 6.8 per cent, of the cases. Here are included not only those who manifest lack of motivation or lack of interest and knowledge of

the basic issues involved in our participation in World War II, but also those who expressed a hostile attitude toward the army and "regimentation." Poor general attitude is not a stress factor in the true sense as, in most instances, it was a result of previous antisocial or asocial behavior patterns rather than a military factor.

II. Comments on Stress Situations

All stress items were evaluated from the viewpoint of psychiatric manifestations revealed during the training period. As indicated in the table, more than half the cases studied, 51.8 per cent, showed no significant stress. Some type of stress of sufficient severity to be considered as a precipitating factor was found in 241, or 48.2 per cent, of the cases studied. Of this number, 109, or 21.8 per cent, showed two or more stress factors. One hundred thirty-two, or 26.4 per cent, showed only one factor. Arduousness of physical and technical training accounted for approximately 25 per cent of all the stress situations. Moreover, it was found—in a review of the cases—that many trainees showed psychiatric symptoms secondary to some degree of partial physical disability which had been incurred, in the great majority of cases, prior to induction, but, in a few, during training. This accounted for 70 cases, or 14 per cent, of the stress situations mentioned. Homesickness and family problems were responsible for approximately 10 per cent of the upsets. Poor attitude and motivation were found in about 7 per cent of the cases. Lack of ego incentives was found most often in combination with other factors and rarely occurred alone.

III. Discussion

In 259 cases, or 51.8 per cent, no significant or important stress or situational factors were encountered other than those found to some degree in all enlisted men. No particular phase of army service could be singled out as a precipitating cause.

In these 259 cases, previous personality or previous behavior patterns were the paramount factors. Of these, 17 manifested enuresis, 24 were mentally deficient and 12 had psychoses or organic disease of the nervous system. These categories accounted for 53 of the cases in which stress was not an important factor and where previous personality factors took precedence.

Of the remaining 206 cases, 48 manifested chronic anxiety, 26 demonstrated chronic somatic reactions and 132 revealed previous personality reactions which were included under inadequate personality (lack of adaptability) or misconduct. Of these latter two reaction patterns, chronic misconduct was found to occur in 31 of the cases and chronic inadequacy in 101.

It appears that anxiety is more often caused by stress factors than are the other diagnostic categories.

One hundred thirty-five cases of anxiety were caused by stress factors.

Somatic reactions resulting from stress are second in order of frequency. Eighty cases of somatization reactions were caused by stress.

Because a combination of factors frequently existed in these early cases, it was difficult to arrive at an accurate percentage of each category. This was particularly true of the differentiation between misconduct and inadequate personality, as, in these early cases, the soldiers manifested symptoms of both types of reaction. In many instances it was difficult to separate somatization reactions from inadequate personality reactions. However, anxiety, insecurity and/or depression were found in a large percentage of the cases. Most of these manifestations were not severe and disposition by discharge or general courtmartial or referral to general hospital was necessary in only 1 per cent of all trainees.

IV. Summary

While the classification of some of the stress factors is rather arbitrary—as many of these influences are interrelated—and while some of the figures in relationship to the true stress factors may not be entirely adequate or accurate, they represent a rough approximation of the true picture with respect to precipitating influences. It was felt that the previous personality had a great deal more to do with some of the symptoms encountered and that stress factors may actually be found as important causes in fewer instances than indicated here. However, the study does cover two additional things: (1) the interplay of forces between a particular type of individual and a particular new type of situation (the army); and (2) the army's successful attempt to manipulate the situation so as to utilize all types of men in the emergency situa-

tion and therefore fit the situation to the man, as well as the man to the situation, as by proper reassignment.

Dislike of regimentation, home and family problems or homesickness, loss of normal emotional security, change in situations or attitudes and fear (universal factor), were experienced by all men but only 5 to 10 per cent found their way to the personnel consultation service. However, the fact that these stresses did exert appreciable influence in a number of the trainees merits consideration and study.

Arduousness of physical or technical training is perhaps overemphasized in these tabulations and is probably linked more than is indicated here with reaction to change in mode of life or ideology, and to adjustment in group life in which the welfare of the group takes precedence over a man's individual desires. Moreover, this factor—arduousness of the training—was the thing most crystallized in the mind of the soldier in expressing his dissatisfaction. Furthermore, as indicated in the table and discussion, many of these stress factors are interrelated.

In conclusion:

1. Arduousness of the physical training, including newness of the physical factors involved, and arduousness of technical training, including newness of the adaptive situation and dislike for regimentation, accounted for about 25 per cent of the difficulties encountered. Reaction to partial physical disability accounted for 14 per cent. Homesickness and family problems were responsible for about 10 per cent and poor motivation for 7 per cent.

2. (A) Anxiety was the syndrome most often caused by stress. The second most important group of symptoms was the somatic or conversion type. (B) In 51 per cent of the cases stress factors were not of primary importance, and the previous personality of the soldier played a greater role. (C) More than 80 per cent of the cases seen were associated with anxiety, somatic reactions or inadequate personality.

3. The large majority of the reactions encountered were not sufficiently severe to warrant discharge of the soldiers.

4. Analysis of the stress factors in regard to the personalities who experience them has a *prognostic* value.

Ellis Hospital
Schenectady, N. Y.

EDITORIAL COMMENT

WELCOME, DOCTOR!

The school doctor, the medical man of our public educational system, is the fellow whose business it is to see that our school children can see normally, hear normally, and breathe adequately —with or without the help of glasses, hearing aids or adenoidectomies. He is the man responsible for seeing that athletic or even curricular activities do not overstrain weak hearts, for detecting tuberculosis in its early stages, and for combating the spread of such things as acute epidemic conjunctivitis and dermatophytosis. It is his responsibility to detect malnutrition, and direct its correction by home or school-lunch prescription. It is his job to supervise detection of dental decay and defects and to arrange for correction. He has become the guardian of the physical health of our school children.

The job of school doctor is a comparatively new one. A century ago, the position was unheard of; and only a generation ago, many first-class school systems made no provision for school physicians. It was the schools' business to teach; it was the business of parents to guard their children's health. Only when parents and teachers began to appreciate that the trouble with some "stupid" children was that they could not see, and the trouble with others that they could not hear, did eye and ear clinics, and, finally, the school physician, become officially recognized institutions.

Today, the school physician is an indispensable part of any good educational system. He is, in our larger systems, part of the general public health service; he has adequate clerical help and a specially-trained nursing staff. Teachers are trained to call on him; parents are generally informed about his position. It is his business, with the help of his nurses, to detect and diagnose conditions that neither teacher nor parent—both laymen in medicine and public health—can be expected to recognize.

Today's school physician is a busy man and may be an overworked man. He cannot be expected to rejoice at material additions to his professional burdens and professional responsibilities. But as medicine advances, his burdens and responsibilities are inescapably increased; and he cannot expect those of us whose

specialties are involved in his added burdens to fail to approve the increase. The Department of Health of New York City merits, we think, psychiatric approbation for calling attention to a present increase in the burden of school doctors' responsibilities.

The 250 city department of health physicians serving New York's 1,098 public and parochial schools are devoting special attention during the 1951-1952 school year to the emotional—otherwise mental or psychiatric—problems of school children. At a staff meeting before the start of classes in September, Dr. Leona Baumgartner, assistant health commissioner, and Dr. Robert W. Culbert, director of the city health department's bureau of school health, instructed all school physicians to take special account of mental health problems.

Dr. Baumgartner's remarks are worth the attention of psychiatrists. Telling the school physicians that they must be alert for early signs of emotional disorder, thus preventing little problems from growing into big ones, she is quoted as saying, "Probably more than 90 per cent of emotional maladjustment in children, if found early enough, can be handled without extensive specialized care by the Health Department school doctor, working in conjunction with parents and teachers." She added that a normal and emotionally-healthy family was the best assurance of a child's mental health.

Dr. Culbert emphasized a common and frequently-overlooked factor in emotional disorder, in asking the school doctors to be particularly alert to the close relationships between physical defects and difficulties, and emotional and behavior reactions.

With the qualification that not everybody will accept Dr. Baumgartner's estimate of the amount of emotional maladjustment which can be handled without extensive specialized care by the Health Department physician, this is a mental hygiene and mental health program which calls for psychiatric approval. Of course, one cannot expect that 250 doctors, who are largely preoccupied with other medical matters, can bring about improvement of sensational proportions in New York City's children's emotional health. But they can help many children, and they can insure a start in the right direction for an important children's health effort.

It may be worth mentioning that Drs. Baumgartner and Culbert are not psychiatrists. They are both pediatricians with public

health experience, and their emphasis on psychiatry is thus in fields where emphasis is needed most. When one adds the information that the New York City Health Department has assigned school physicians for the first time to six of the school system's child guidance clinics, progress is plain. It has long been a psychiatric contention that, whoever other assigned personnel may be, a physician is indispensable in clinics dealing with emotional or behavior disorder.

We have all too little exact information about the incidence of emotional disturbances in school children. Satisfactory, large-scale surveys are lacking, and perhaps impossible to make. But, on the basis of military, industrial and other fields where information about adults is available, it seems possible that emotional handicaps in our children outnumber and outweigh all other medical difficulties whatsoever. If we are to deal with them adequately, we must provide medical attention. The physician is essential for differential diagnosis, for direction of treatment or corrective procedure, and, in many cases, for the personal conduct of therapy.

All this means that the school physician, besides being something of a pediatrician, something of an epidemiologist, something of a public health expert and something of a general practitioner, should also be something of a children's psychiatrist. This is a great deal to ask. Psychiatry for children is specialization within specialization; and its practitioners are qualified by years of particularized training and practice. We cannot suggest that all school doctors undergo the rigorous and time-consuming discipline now expected of qualified children's psychiatrists. Neither can we suggest that school physicians be appointed only from among qualified children's psychiatrists and then be required to study pediatrics, public health and epidemiology, besides refresher courses in general medicine.

But we can, as individuals and as members of the medical staff of a great agency of state government devoted to mental health, see to it that we do our part, of what we and the school physicians find possible, to provide orientation in a field of increased duties and responsibilities. Medical school psychiatry plainly fails to meet requirements; formal psychiatric specialization appears out of the question for the overwhelming majority of school doctors; somewhere between, there must be room for instruction and practice which the school physician can utilize to carry out his enlarged

tasks properly. These remarks are advanced, not as a program, but as an expression of approval, good will, and willingness to aid in the working-out of whatever plans may be advanced to improve diagnosis and treatment of school children's problems.

Meanwhile, as individuals and as staff members of New York State's Mental Hygiene Department, we think we might do well to extend congratulations to the New York City Department of Health for recognition of a most important problem, and for taking a progressive and intelligent step in attempting to cope with it.

BOOK REVIEWS

Sociometry in France and the United States. A Symposium. Georges Gurvitch, editor. vii and 261 pages. Cloth. Beacon House. Beacon, N. Y. 1950. Price $7.50.

Sociometry, Experimental Method and the Science of Society. By J. L. MORENO. xvi and 220 pages. Cloth. Beacon House. Beacon, N. Y. 1951. Price $6.00.

The tools and techniques of sociometry have demonstrated their worth in many instances. These two volumes deal with many aspects of the field and apply the techniques to local and national situations. The one danger apparent is that the sociometrists will make of themselves a cult and become so entranced with their own ideas that the very perspective they seek will be lost. The idea of participation and of the investigator working from within and not without has demonstrable value, but it is yet to be proved that it is a panacea.

Sociometry in France and the United States serves to illustrate the similarities of thought-development by men in the two countries, while Moreno's book consists of recent papers, published and unpublished. There is much of interest here, and the material has been well arranged, though the symposium cannot avoid being something of a collection of scattered, specialized studies.

Jealousy in Children. By EDMUND ZIMAN, M. D. 236 pages. Cloth. A. A. Wyn, Inc. New York. 1949. Price $2.75.

This unique book, written in an appealing popular style with psychoanalytic orientation, defines jealousy, describes and interprets its symptoms, and presents a positive program for handling it. Many illustrative cases show what can happen in any household when jealousy is properly or improperly managed.

Jealousy is inevitably present in children but need not become a serious problem. The emotion should be recognized and allowed expression rather than repressed to cause later trouble. The author states, "I want to assure parents that permissiveness and gentleness will help them reach their goals more surely than deprivation and punishment." Parents can do much in promoting their child's mental health by satisfying the young child's basic needs of love, understanding, and protection, and by avoiding inconsistency in discipline, favoritism, and making of comparisons. Dr. Ziman's attitude is sympathetic with the worried parent as he elucidates how children's troubles are a reflection of their parents' and even their grandparents' problems.

An Introduction to the Study of Experimental Medicine. By CLAUDE BERNARD. Translated by H. C. Greene. 226 pages. Cloth. Schuman. New York. 1949. Price $3.00.

In a period of civilization like the present, when men of high authority in their countries make the greatest effort to blind their listeners to truth, when men deliberately twist words for their own ends, when paranoia is rampant, and the lie is the idol to be worshipped, it is a relief to get a breath of fresh air by reading a book about the truth.

Claude Bernard was born in 1813 and published the "Introduction" in 1865. He is considered a physiologist, one of the greatest.

Why is he still considered one of the greatest? Because in his search for truth, he found facts that have remained to guide others further into that vast undiscovered field called the "whole truth." Claude Bernard expresses his opinions of the way that facts of truth are discovered. They are as applicable in medicine as in any other field of endeavor. One may say they are more specific than those very well-known logical principles of Mills' experimental method.

It is especially important to realize that Bernard starts by defining his terms. For example, a chapter is taken to clarify the difference between an "observer" and an "experimenter." The former, very briefly, is one who looks for all the facts without pre-judgment, the latter one who starts an experiment with a pre-conceived idea to see what nature will reveal. Although he states that the tripod of progress is feeling, reasoning and experimentation, Bernard limits himself to the consideration of criteria for valid experiments.

He writes of scientific men who, though using formal logic correctly to form systems in science, are the cause of confusion by their material fallacies. Their ideas are fixed, regardless of experimentation, because of insufficient observation and neglect of what may contradict their ideas. Bernard holds that experimental method has an independent character controlled only by the laws of nature. Reality is also hampered by men who, as experimenters, "are out to prove" their new ideas, especially when they are "jumped on" by other "authorities." All generalizations of experimental medicine are not absolutely certain; and, therefore, the deductions need to be verified. Bernard agrees that all natural reasoning is by syllogism. He also states that the experimenter should have correct judgment and insight into reality: something which is determined by *doubt*, a feeling of belief between credulity and skepticism, based on the knowledge that no scientific axioms have absolute proof.

The new printing is in simple form and easily readable. It is an important addition to the library of those who wish to solve problems scientifically rather than emotionally.

Group Life. By MARSHALL C. GRECO. xvi and 357 pages. Cloth. Philosophical Library. New York. 1950. Price $4.75.

The generally accepted explanations for origin of the species, heredity, and deviations from the norm, including the psychoses, are challenged in this book; and an attempt is made to invalidate them. Life is held to be composed of groups, and man is conceived to be inately a group animal. The individualistic approach is to think of individuals, and to think of individuals who compose groups. The author, on the other hand, holds the group to be paramount, and believes the processes of the individual to be entirely determined by it. The claim, for example, is made that evolution is dependent upon there being a previously prepared spot in the group life for a mutation, and that a new form only fills in a previously-existing gap. This reviewer cannot accept the theses of this book. The reasoning used is mainly theoretical, and is an over-simplification of the determinants of the individual.

Modern Abnormal Psychology. W. H. MIKESELL, editor. 880 pages. Cloth. Philosophical Library. New York. 1950. Price $10.00.

This symposium, designed "to meet the interest of the general public in abnormal psychology, as well as the requirements of the student for a reference and source book," has resulted in a work directed far more toward the public than the student. The area covered by the volume is considerable, resulting in a necessarily superficial and at times inadequate treatment of the subject matter; thus limiting its use in the academic setting. Although many of the chapters are factual, there are others in which the contributors are forced to write in both vague and general terms. The approach is somewhat unusual but the price is above the usual text in this area, and the book is of little use to the professional psychologist.

The Dream of Alcestis. By THEODORE MORRISON. 119 pages. Cloth. The Viking Press. New York. 1950. Price $3.00.

The Legend of Alcestis has been put in modern form. Her husband, King Admetus, is depicted as a monarch setting out to limit the powers of the priests, and Hercules is depicted as a good natured strong-man, subject at times to ungovernable rages, who is being sent on various tasks and quests to keep him occupied and out of trouble. The title is taken from the explanation here given for the myth of Hercules' rescue of Alcestis from Hades: Hercules in a drunken stupor staggered up to the door of her sick-room shouting he would fight the person responsible for the illness. The shouting penetrated Alcestis' coma and she translated it into a dream which increased her will to live. Conversation plays the major role in this poetry, and it is fresh, modern and unstilted. The book is a pleasure to read.

A Few Buttons Missing. The Case Book of a Psychiatrist. By JAMES T. FISHER, M. D., and LOWELL S. HAWLEY. 282 pages. Cloth. Lippincott. Philadelphia. 1951. Price $3.50.

This autobiography helps to prove that psychiatrists are human; that they can be wrong, that they do not cure every patient. Dr. Fisher, a psychiatrist with half a century of experience, reveals to the reader his homely philosophy of living. He tells of his many experiences, his associations with Freud, his disagreements with formal psychoanalytic theories. He describes, briefly, many psychiatric patients whom he treated. He uses many similes, comparing the psychopath with a cow who strays away from the herd; comparing the stomach to an automatic washing machine; comparing the conscious mind with a big business executive who does not want to be bothered with trifles, etc. But best of all, in a philosophical way he tells the reader about his joys and his sorrows, his successes and his failures.

The reviewer read every page of this book for fear that he might miss a sentence here or a paragraph there of truly fine simple philosophy.

The Oxford Group. Its History and Significance. By WALTER HOUSTON CLARK. 268 pages. Cloth. Bookman Associates. New York. 1951. Price $3.50.

This is a very useful book on a religious movement which has important psychological implications. The "house party" and public confession techniques have, in particular, psychiatric interests as religious applications of group therapy. Mr. Clark's book covers the history and some of the tenets of the movement, and reports some individual case studies which review from the conscious level good, bad and equivocal effects of the movement on the individual.

In particular, the student of religious psychology, the group therapist and the psychiatrist who makes use of Alcoholics Anonymous should find this volume of interest.

Trends in Gerontology. By NATHAN W. SHOCK. ix and 153 pages. Cloth. Stanford University Press. Stanford, Calif. 1951. Price $2.50.

While no separation is made, this book falls into two sections; the first dealing with the sociology of the aged and the second with the trends and developments in research on the subject. The section on research tends to be a simple listing of the work being done at the various experimental centers. On the other hand, there have been few books which have so recognized the sociological basis of all geriatric problems. With our ever-increasing numbers of aged, a sensible program for continuing them as functioning citizens is imperative. The problem of the psychoses of aging has been recognized, but they fall outside the scope of this book.

An Experiment in the Prevention of Delinquency. By EDWIN POWERS and HELEN WITMER. xliii and 649 pages. Cloth. Columbia University Press. New York. 1951. Price $6.00.

The Cambridge-Somerville Youth Study which was initiated by Richard Clarke Cabot is one of the first comprehensive efforts to discover objectively the value of social work and counseling in the prevention of delinquency among children. Two groups, consisting of 325 boys in each were chosen, one group being given constant counseling and the other being used as a control. The result as to delinquency was disappointing, there being about the same amount in each group, but there was a definite feeling on the part of the workers that the help given was useful in many cases.

The actual delinquent child, for whom the study was originally undertaken, seemed to benefit little, perhaps due to the lateness when work was started, but more encouraging results were noted when the child was mildly maladjusted and the delinquency was sporadic and due to his maladjustment. At the same time, children with severe neurotic difficulties did not seem to benefit to any great extent from the work done. The indications gained from this study are that this type of counseling may prove of value, but only in selected cases. It is to be hoped that more work along these objective lines will be done, especially since this 10-year study was disrupted by the war and the conditions complicated.

Soviet Russian Literature. 1917-1950. By GLEB STRUVE. xvii and 414 pages. Cloth. University of Oklahoma Press. Norman, Okla. 1951. Price $5.00.

To discuss a state-controlled literature without discussing the state is impossible, but, as Gleb Struve has succeeded in doing, the accent must be kept upon the literature. It is too easy to deliver a polemic against the restricting state and thus lose any possible objectivity in regard to the merits of writings as writings. In this book the trends of Soviet literature from the transitional and romantic period of the revolution to the almost complete stagnation caused by the recent Zhdanov Decrees are explored. The coverage is very thorough, and an excellent over-all picture is given, especially valuable as the available material on recent Russian literature is slight, and a perspective is difficult for a reader to gain.

Medical Care for Americans. The January 1951 issue of *The Annals* of The American Academy of Political and Social Science. Philadelphia. 1951.

The articles in this issue of *The Annals* are concerned with general problems regarding medical care as they effect the whole country, and seldom go into specific fields. The emphasis is from the sociological point of view, and the coverage is good.

A Lamp Is Heavy. By SHEILA MACKAY RUSSELL. Illustrations by Jean McConnell. 257 pages. Cloth. Lippincott. Philadelphia, London and Montreal. 1950. Price $3.00.

This is an attractive edition with descriptive and meaningful illustrations, especially for one who has been a student in a hospital school of nursing.

The author has captured the universal feeling-tone of a student nurse from the time she selects her school straight on through the day of graduation. Any nurse will recall her own experiences with nostalgic appreciation. One can identify herself readily with the student and can feel again frustration, satisfaction, delightful fellowship and all the gamut of emotions encountered in dealing with lessons, patients, family, hospital and community, home and social life, boyfriends—and the sacrifices necessary in order to be ready to render service at all times.

This reviewer's adverse criticism of the book is solely for pages 94, 95, 96 and 97. Every nurse knows that the hypodermic syringe, with the drugs thereby given, is the most carefully-guarded instrument of treatment with which she deals. She cannot afford to be facetious or careless in discussing its use. Certainly it is never under any circumstances used as an instrument of discipline for an aggressive male patient. The nurse who encounters such problems must develop qualifications which will fit her to deal with them in a dignified and effective manner.

The author has dealt with the life of the student nurse in such a humanly interesting manner that this book should have appeal to every type of reader.

Long the Imperial Way. By HANAMA TASAKI. 372 pages. Cloth. Houghton-Mifflin. Boston. 1950. Price $3.50.

Hanama Tasaki, a former Japanese soldier, is the author of *Long the Imperial Way,* a novel of men at war; the Japanese kamikaze pilot on suicidal missions, the frantic despair of Japanese soldiers, of their efforts militaristically in the Pacific areas. The author attempts to depict the psychology of his former comrades-in-arms by probing behind their inscrutable faces and their, at times, indecipherable heroism.

Mr. Tasaki has written poignantly and remarkably about the frustrations of garrison duty, the impact of battle, the brutality of some Japanese soldiers, the long and cruel training imposed on recruits, the final surrender of Japanese imperialists. *Long the Imperial Way* is a strong novel, a revealing piece of work, written in a framework denoting compassion and sound understanding. As the first novel written in English to come from a Japanese soldier since World War II, it is exciting for the illumination it throws on Japanese mentality and conduct.

The Body. By WILLIAM SANSOM. 215 pages. Cloth. Harcourt, Brace. New York. 1949. Price $2.75.

The jacket carries in multicolor six statements of important British critics, attesting that this book by a young English author represents something extraordinary in literary achievement. But this reviewer finds that its people and situations are boring to the nth degree. The story of pathologic jealousy with paranoiac trends is depicted; the psychological basis is taken from Freud's well-known type in which an unconscious feminine identification forces the afflicted man to identify with the woman; the latter attitude is unconsciously warded off with jealousy.

There is only one distinguishing mark in the book; after working through three-fourths of the narrative, one comes across this statement: "Broadly, this plan invoked Diver (name of the rival) as a friend; thus the lover of my wife was my friend; I can see now how plainly I welcomed sensations of injustice and torment more refined than any I had yet suffered." In other words, the author has some inkling of the unconscious pleasurable self-torture imbedded in jealousy. This singular statement compensates but poorly for the lack of inner development of the husband who suddenly —after 20 years of happy marriage—shows pathologic attitudes, completely disconnected from his previous life, especially his childhood history. If your reviewer had not felt the obligation to carry out the innocently accepted assignment of reviewing the book, he would have stopped reading after a few pages.

Make Light of It. Collected Stories. By WILLIAM CARLOS WILLIAMS. IX plus 342 pages. Cloth. Random House. New York. 1950. Price $3.50.

The Collected Later Poems. By WILLIAM CARLOS WILLIAMS. 239 pages. Cloth. New Directions. Norfolk. 1950. Price $3.00.

William Carlos Williams is a small town doctor and child specialist and his experiences add color to both these works. His short stories are actually segments of life; they leave the feeling of continuity, that the events narrated are part of a sequence that started before and will continue afterward. In contrast to his short prose pieces his poems are often symbolical, and for this reviewer at least, quite difficult; difficult but often unexpectedly enjoyable.

There is a profound faith running through the books. Disappointments and misery may be recorded—powerfully and savagely—but it is not the misery of hopelessness. A child's life may be saved, with every probability that he will grow up to a world of poverty and sorrow, but it is still right that it be saved. Much of the power of the works comes from a directness and simplicity of language.

Industrial Psychology and Its Social Foundations. By MILTON L. BLUM. 518 pages. Cloth. Harper. New York. 1949. Price $4.50.

Clinical workers have realized for a long time that what a person does or what experiences he lives through are not nearly so important as the attitude he develops toward these events. In this book the importance of attitudes with regard to job satisfaction is discussed and clarified.

The authors review the well-known Hawthorne studies which demonstrated that the attitude of the employer toward the employee and the corresponding attitude of the employee toward the employer were important factors in job satisfaction. The author investigated the value of introducing mental hygiene principles into the organization of industrial plants and came to the conclusion that the more democracy there is in the plant the less disruption under strain will occur and the greater will be the job satisfaction, as well as the productivity of the entire undertaking.

As an attempt to introduce mental hygiene principles into industrial organization, this book deserves a hearing on the part of all interested workers. The data are still meager and the formulations tentative. Nevertheless, a pattern seems to emerge in the author's thinking in which attitudinal factors are far more important than incentives and other more conservative methods for motivating and controlling human behavior.

The Psychology of the Suffering Mind. By ISRAEL J. GERBER. xvi and 202 pages. Cloth. Jonathan David. New York. 1951. Price $3.50.

There is often a certain inconsistency in studying a piece of literature of which the age can be measured in thousands of years. After stating that the Book of Job is a folk tale, with more than one author, and is without historical basis, Dr. Gerber then treats it as a study of counseling techniques during involutional melancholia. Job's three friends are shown to use a directed type of psychotherapy, which is not favored by the author. The theological bases and the results of their visit are discussed; the results being held favorable because of emotionable catharsis. Dr. Gerber closes his book with the wish for closer co-operation between the rabbi and the psychiatrist, which may best be accomplished by a greater stress on pastoral training for the rabbi, and a consequently better understanding by him of the role of the psychiatrist.

Communist Zoo. By HANS MULLER. Unpaged. Paper. Swen Publications Co. Inc. New York. 1951. Price $1.00.

Here is another Aesop in pictures in the style of *White Collar Zoo* and *Home Sweet Zoo*. The illustrations which form this particular satire are very well chosen and some are rather more subtle than is to be expected in this sort of thing. *Communist Zoo* is to be recommended as good entertainment, good anti-Communist propaganda and good mental hygiene.

The Collected Papers of Adolf Meyer. Vol. III, Medical Teaching. Eunice E. Winters, editor. 557 pages. Cloth. Johns Hopkins Press. Baltimore. 1951. Price $30.00 for four-volume set.

This, the third volume of the set, contains the ideas and writings for which Dr. Meyer is most famous. It describes his methods of teaching and his methods of studying mentally-ill persons, that is, psychobiology. In his introduction Dr. Franklin G. Ebaugh states: "Out of his work has developed much of our present-day teaching of psychiatry; the study of the normal or psychobiology; the study of the basic principles underlying abnormal behavior, psychopathology; and the study and treatment of the patient who has a complaint. To aid in these studies he has developed important tools: the personality study, the direct and indirect examination procedures, and the life chart. . . ."

"The 'Complaint' as the Center of Genetic-Dynamic and Nosological Teaching" is the first paper in this volume. One might say that in this Dr. Meyer gave basic premises for his later principles of psychiatric study. Following this, the book has sections relating to the principles of teaching, teaching methods and materials and opinions relating to the meaning and scope of psychiatry. Finally, there is a section, "Outstanding Figures," in which are recorded short biographies of several individuals, prominent in the psychiatric field.

Introduction to Neuropathology. By SAMUEL P. HICKS and SHIELDS WARREN. 494 (large) pages, including index. Cloth. McGraw-Hill. New York. 1950. Price $10.00.

The Hicks and Warren *Introduction to Neuropathology* is an easily readable text on a subject most general pathologists and students often tend to neglect. Yet, just as often, they are in search for some authority or reference which will give ready answers to their questions.

This text has many simplified diagrams for rapid reading and interpretation; many beautiful illustrations, for specific examples, with which readers' cases may be compared; and several tables for quick summaries and differential diagnoses.

The diseases are classified as most general pathologists would classify them into eight chapters such as: "Reaction Pattern of the Nervous System," "Circulatory Disturbances," "Cerebro-Spinal Fluid," "Inflammations," "Tumors," etc. All the chapters are fully illustrated. The material excludes much of historical interest (probably to advantage at times) and is up to date.

The publishers should be commended for the excellent binding, paper, printing, and reproductions.

Mid-Century. The Social Implications of Scientific Progress. John Ely Burchard, editor. 549 pages. Cloth. The Technology Press and John Wiley and Sons. New York. 1950. Price $7.50.

This book is a record of the convocation held at the Massachusetts Institute of Technology in 1949 to investigate the social implications of some of the major problems raised by science in the twentieth century. It contains free discussions as recorded on tape and later transcribed into print. In addition, there is provided a great deal of collateral material from other speakers and writers and from newspaper reports and editorials.

Despite the facts that this book is extremely long and that few readers will peruse it from cover to cover, the material therein is a clear statement of the principal points of view of many great minds with respect to a number of current problems involving man and his relation to the world in which he lives. Emphasis is placed on such concepts as the exploitation and conservation of natural resources, the influence of science on man's faith, technological assistance to underdeveloped areas, the role of the individual in modern society, the problem of how higher education shall be supported in the future, and the question of specialized education for the world of tomorrow.

Although this book is much too long, and rather hard on the eyes because of its small print, it contains interesting material for the student of social issues.

By the Finger of God. By S. VERNON MCCASLAND. xii and 146 pages. Cloth. Macmillan. New York. 1951. Price $2.75.

Demon possession and the exorcism of these demons by Jesus play an important role in the New Testament. The symptoms of the illnesses treated have been studied and tentative diagnoses suggested in four cases: one epileptic, one manic-depressive, and two hysterics. By indirect reasoning, an attempt is made to establish the veracity of the stories of exorcism; showing them not to have changed in form in the period covered by the Gospels, and showing exorcism to have been more common to Palestine than to Greece. An idea of much interest concerns the demons speaking to Jesus. It has been commonly supposed that when they spoke they were paying homage, while the author states that they were in reality *naming* the Messiah in order to get power over him—no homage was possible, the demons and the Messiah were deadly enemies and it was a contest as to which was the stronger. The explanation given—that the afflicted people were making a desperate effort to stay in the seclusion of their psychoses and that in so doing they were making statements that were common rumor at the time, though Jesus himself at this time had never claimed to be the Messiah—must be considered controversial psychiatrically.

Kahlil Gibran: A Biography. By MIKHAIL NAIMY. 265 pages. Cloth. Philosophical Library. New York. 1950. Price $3.75.

This is an intimate biography by one of the people who knew the poet best. From earliest childhood, Gibran was very sensitive to the feelings of other people, and much given to introspection. A mystic, like many of his Lebanese forebears, he could still approach the problems of life in a very practical manner. At times, however, before he reached emotional maturity he was as torn apart by his inner conflicts as any other young man. He felt great love many times, but proposed to a woman who was utterly unsuited to him—a practical forthright and completely frank woman. In her bewilderment, she spoke words which could only wound him and drive him away, as he unconsciously hoped. Again and again he retreated into himself, melancholy and aloof, and in that state, not involved with the world, he was able to write his most profound work.

The Burden of Diseases in the United States. By ALFRED E. COHN and CLAIRE LINGG. 129 pages. Cloth. Oxford University Press. New York. 1950. Price $10.00.

This essay on the morbidity and the mortality of various diseases comes to the buyer wrapped in a heavy cellophane jacket. It is really published in two parts, one is a large thin book containing explanatory material with figures and tables and the other a folder enclosing numerous colored charts.

The statistics given in this book cover, in most cases, a period of 40 years. In many calculations, they are extra-polated to 1960. These tabulations are divided also into age groups. The authors have done a very fine job of collecting statistical material from many sources. They have consolidated these facts in such a way that the reader can easily get a "bird's-eye" picture of the prevalence of disease. This book, therefore, will make an important addition to the medical library.

The Psychology of Man's Evolution. By P. D. OUSPENSKY. 98 pages. Cloth. The Hedgehog Press, Inc. New York. 1950. Price $2.50.

This thesis, written in the form of five lectures, has a different approach to the study of man than current psychological theories. Mr. Ouspensky's system studies man from the point of view of what he may become, whereas present-day psychology studies man as he is. Ouspensky's basic idea is that man is an incomplete being. For man's evolution to take place, there has to be a "development of certain inner qualities and features which usually remain undeveloped and cannot develop by themselves." The author repudiates much of our present-day psychological knowledge, but gives little data to back his own theory.

Snake Pit Attendant. Jesse Walter Dees, Jr., editor. 144 pages. Cloth. Exposition Press. New York. 1950. Price $2.50.

This book is a mosaic of depravity and human stupidity which an industrious cleaner of latrines could have put together almost anywhere. Approximately as fair a picture of what goes on in our mental hospitals could be obtained from inspection of their sewer traps. The effect of this book on the ignorant can only be to damage the reputation of decent institutions and produce no clean-ups in the bad ones.

That a sociologist of professional standing should sponsor and edit this work is somewhat surprising. Compiled by a man who has drifted from hospital to hospital in search of women, good times and tall stories, in what he calls the "bughouse racket," the book reminds this reviewer vividly of the infamous *Confessions of Maria Monk* and will serve about as good a purpose.

The Book of the Jaguar Priest. By MAUD WORCESTER MAKEMSON. 238 pages including index. Cloth. Schuman. New York. 1951. Price $3.50.

Because of modern conquest and modern extirpation of civilizations, this record of an earlier ruthless attempt has considerable contemporary interest. *The Book of the Jaguar Priest* is a translation by Maud Worcester Makemson of the Book of Chilam Balam (the Jaguar Priest) of Tizimin. It was set down in Roman lettering by one of the last who could read the ancient heiroglyphics and it is a record of atrocity and oppression to stand beside the fate of modern Poland.

To the psychiatrist this tale has a further interest. The Maya felt that they were guilty before the gods and thus had deserved the fate which befell them. It is as impressive a record of the profession of a people's guilt as one could well find, for instance, in the Old Testament prophecies.

Proceedings of the National Conference of Social Work—1948. 198 pages with index. Cloth. Columbia University Press. New York. 1949. Price $6.00.

This collection of 52 papers presented at the 1948 National Conference of Social Work contains contributions by prominent figures in the field today. Most of the papers review basic trends in the profession over the past 75 years and discuss existing problems and challenges. Particular emphasis is placed on the contribution social work can make toward a strengthening of democratic structure. The papers are fairly comprehensive in their coverage of pertinent topics, although they make no pretense at being intensive or exhaustive studies. Members of the profession will find the book informative and stimulating.

Morals Since 1900. By GERALD HEARD. 223 pages. Cloth. Harper. New York. 1950. Price $3.00.

The author presents an outline of morals of the past 50 years, tracing the development and attitudes throughout the first half-century. He has divided his material into four parts. "Part I, The Political Process," shows the changing conditions under which democracies, and especially Britain, had to proceed. "Part II, The Changes in the Five Moral Laws (Force, Sex, Wealth, The Given Word, Thought)," deals with changes of stress in our ethics as a result of varied inventions which in the five specified fields of behavior affected conduct or permitted moral variations. "Part III, The Moral Effects of Pure Research," deals with the effects on moral behavior of advances in cosmology, biology, anthropology and psychology. "Part IV, The Three Criteria of Civilization, (Law, Education, Health)," tries to set up standards whereby an estimate of morality can be made for the past 50 years.

This book vividly portrays changes in attitudes toward morals as influenced by developments in all phases of life activity. The author, not only gives a piercing analysis, but suggests solutions to phases of the ever-present problem of morality.

International Journal of Group Psychotherapy. Volume I, Number 1, April 1951. International Universities Press, Inc. New York. $7.50 annual subscription.

This official journal of the American Group Psychotherapy Association promises to be a most valuable publication. Contributors to the first issue include some of the pioneer and present active leaders in the group psychotherapy movement. The first issue includes an editorial, 11 scientific articles, a number of abstracts (including one of an article in THE PSYCHIATRIC QUARTERLY); and subsequent issues will include book reviews.

Samuel B. Hadden, M. D., is chairman of the editorial committee and S. R. Slavson is consulting editor. Both of these writers, Lewis H. Loeser, Florence B. Powdermaker, J. W. Klapman and Louis Wender are among contributors to the first issue.

Gestalt Psychology. By DAVID KATZ. 175 pages including indices. Cloth. Ronald Press. New York. 1950. Price $3.00.

This is a short review and text of the principles and application of gestalt psychology. It is small enough for a desk reference, and it appears to be comprehensive and authoritative. It could find a useful place in any psychiatric library.

Alcohol and Social Responsibility. By RAYMOND G. MCCARTHY and EDGAR M. DOUGLASS. 303 pages. Cloth. Crowell. New York. 1949. Price $3.50.

The data in this book are based on sound research gathered from the Yale Plan Clinic. The material is presented in two parts, "Part I, Basic Principles and Facts"; and "Part II, An Approach Through Education." Part I is largely devoted to a discussion of historical and contemporary drinking practices and attitudes. In Part II, the stress is placed on the educative influence on personality development of all the forces in the environment. The role of the school in teaching about alcoholism is considered vital for a better understanding of alcoholism among the young people of our country.

The subject matter of this book may be useful as a general college text, for training classes of prospective teachers, and for parents and others responsible for the guidance of young people.

Science and the Goals of Man. By ANATOL RAPAPORT. 262 pages. Cloth. Harper. New York. 1950. Price $3.50.

"This book," states the author, "is about the scientific outlook, in particular as it affects three aspects of being human. The first of these is communications. To study it, we shall use a tool called semantics. The second is orientation, which will be considered the subject matter of metaphysics. . . . The third aspect is values, traditionally the concern of ethics."

There are three or four major ideas in this book. It explains the general social and personal significance of relativity; analyzes and clarifies how and why people disagree; explains how scientists think; presents the moral or ethical aspects of science; and extends scientific ethics to what the author calls a culture-studying culture.

The outstanding feature is the wealth of explanatory examples and their presentation in direct, untechnical language.

How to Stop Smoking. By HERBERT BREAN. 96 pages. Cloth. Vanguard. New York. 1951. Price $1.50.

This book is a layman's common sense advice on the way to get rid of the tobacco habit. This reviewer does not endorse the author's interpretation of the psychology involved. He thinks, nevertheless, that the book can be recommended safely to persons who wish to discontinue smoking, whose habit is not too strong an addiction, and in whom the problem is not complicated by too neurotic factors. The physician who will take the trouble to examine this little book may find that he can conscientiously recommend it for more than one patient's problem.

Jackie Robinson. By BILL ROEDER. 183 pages. Cloth. A. S. Barnes & Co. New York. 1950. Price $2.50.

This book should be of particular interest to sociologists and psychologists in that it is an excellent case study in problems of race relations and race prejudice. It is a story, well known to all alert observers, of the acceptance of a Negro into baseball's major leagues. It clearly portrays all of the ground work necessary for such a step—selection of the right person, early training, and the sowing of the seeds of acceptance which finally brought acceptance by whites and Negroes, press and public. The reactions of Jackie Robinson through the "thick-grown jungle of resentment," at his presence in "white man's land,"—resentment which included being chased off the field by the police, having ball parks padlocked against him, and enduring derogatory remarks and actions by opposing players—are clearly portrayed. They vividly depict the emotional and physical barriers which were overcome, before culmination of his rise in the award of recognition as the "most valuable player in the National League."

This is more than a story of baseball; it is a chapter in the history of humanity; and it lights the way toward a better understanding of minority groups.

The Social Crisis of Our Time. By WILHELM ROPKE. 260 pages. Cloth. University of Chicago Press. Chicago. 1950. Price $3.50.

"This book," the author states, "is the result of the reflections of an economist on the sickness of our civilization and on the manner of its cure."

The theme centers around a realistic discussion of current economic policies and an analysis of the problems of modern man. It vividly describes the developments which have brought western civilization to its present crisis; and offers a solution. The author feels that the only cure is a replacement of our "top-heavy economic system" with a natural order, which, "by decentralization and humanization, saves the dignity of man from the steam roller of mass society."

Viper in the Fist. By HERVÉ BAZIN. 183 pages. Cloth. Prentice-Hall. New York. 1951. Price $2.75.

In a completely engrossing novel, a woman is shown who exhibits the culmination of anal-sadistic tendencies to a point where she no longer seems to be a human being. The picture is so complete and so exaggerated that it becomes impossible for the reader to identify with the main character, Jean Rezeau, who holds the unenviable position of being her son. This exaggeration does not impair the story, however, nor does it invalidate the picture of the trends shown in the mother.

Psychotic Art. By FRANCIS REITMAN, M. D., D. P. M. x and 180 pages. Cloth. International Universities Press. New York. 1951. Price $4.50.

This survey of psychotic art is done from the "psycho-physiological" viewpoint. "Such a viewpoint assesses art as a manifestation of man's cognitive capability." The author refuses to recognize the validity of general rules concerning symbolization in art. While not denying that there is a possibility that certain cases could be studied from this viewpoint, he goes to some lengths to attack both the Freudian and Jungian concepts of bases for emotions.

In the case studies chosen, inferences are not drawn; and, at times, there seems to be a reluctance to mention the inferences that the other schools of thought would consider self-evident. Within the frameworks that the author has set for himself, there is much interesting material. The effects of lobotomy and degeneration on art productions are illustrated by case studies.

A Child's Guide to a Parent's Mind. By SALLY LIBERMAN. Illustrations by Kiriki. 145 pages. Cloth. Schuman. New York. 1951. Price $3.00.

Sally Liberman, recently a young student of psychology under Erich Fromm, and Mrs. Kiriki de Diego Newmark have collaborated in this child's-eye view of parenthood. The free-verse preface notes:

> We are concerned with understanding
> parents and children
> and their problems
> and the problems
> which these problems
> produce.

The result is good, if satirical. The book, with its excellent cartoons, should be helpful to any parent, and useful to many therapists dealing with children and their problems.

Frances. By CATHERINE HUBBELL. 299 pages. Cloth. Norton. New York. 1950. Price $3.00.

Personality disorders resulting from a dearth of parental affection form one of psychiatry's most recurrent problems. In the case of Frances, her compensation takes the form of a daily sip of port or sherry which gives the awkward stolid child that warm feeling of belonging and the fleeting promise that she can still find the love and adventure denied her by a beautiful selfish mother and a father who had wanted a son.

Frances' gradual deterioration into an alcoholic provides an interesting psychological study for those who prefer realism to escape literature.

Scientific Social Surveys and Research. By PAULINE V. YOUNG. 621 pages. Cloth. Prentice-Hall. New York. 1949. Price $4.75.

This work, since its original publication in 1939, has had widespread use both as an introductory text and reference volume by sociologists and social work students and by research organizations and social work administrators.

"This volume," the author states, "aims to (1) provide background material on the development, nature, and scope of social surveys and research since their early beginnings to the present; (2) indicate the complex variety of sources of data and provide a basis for the cultivation of the habit of distinguishing between the more and less reliable sources of information; (3) provide at least a minimum of instruction in the use of indispensable scientific tools and methods which may serve as a starting point in social exploration: (4) show the raison d'être and the basic principles which underlie scientific procedure; and (5) indicate the highly interrelated nature and intricate complexities of social life, social processes, and problems which should be considered when one undertakes to study such phenomena as a culture group, a social institution, a community, or a social problem."

This text is definitely prepared for classroom and laboratory use. Its scope is extensive, covering almost all pertinent topics. It should continue to be valuable for students of social science.

The Human Group. By GEORGE C. HOMANS. 484 pages. Cloth. Harcourt, Brace. New York. 1950. Price $6.00.

"Mr. Homans' major purpose," states the foreword, "is to work towards a sociological theory which will state, in convenient and compact form, the interconnected uniformities detected in the behavior of men in groups. This book is largely based on intensive and systematic scrutiny of five small groups, and proceeds on the assumption that close study of these particular groups will enable us the better to understand the workings of groups in general."

This book is interesting for any student of the way people live together. It is well written in non-technical terms.

Snowslide. By CARL JONAS. 307 pages. Cloth. Little, Brown. Boston. 1950. Price $3.00.

The setting of this novel is ironically called "Excelsior" and its theme is: to each his own frustration. It includes a stock set of fictional characters of the sort one might expect to find in such places . . . a grasping female who owns a beauty business . . . a handsome ski instructor . . . a second-rate novelist and a movie actress. Neither the plot nor the solution offers anything unusual, and the moral is too obvious to be stomached.

Adler's Place in Psychology. By LEWIS WAY. 334 pages. Cloth. Macmillan. New York. 1950. Price $4.50.

The author has concentrated almost entirely upon doing an evaluation and review of Adler's scientific theories. He portrays the problems which concerned psychologists at the beginning of Adler's time, and clearly describes Adler's method of coping with these problems. The ideas which were incorporated in building his theories, and his differences with other psychologists, particularly Freud, are discussed. The author's aim is to prove that Adler should not be regarded as a "superficial psychologist." He hopes "to establish him also before severe critics, or if I seek to represent him in his rightful place among the great masters of his subject."

The book is written in such a manner that it should appeal to both layman and the scholar. The former should derive an understanding of Adler's concepts, and the latter may sharpen his thinking along non-Freudian lines.

In view of the tremendous emphasis on Freudian concepts today, it might be well worth the time of all students of personality to refresh their memories of Adler's ideas.

Twentieth Century Mental Hygiene. By MAURICE J. SHORE, et al. 444 pages. Cloth. Social Sciences Publishers. New York. 1950. Price $6.00.

This book consists of individual chapters by well-known national and international figures in various fields which contribute to the study and promotion of mental health. It discusses, in six sections: "New Directions in Mental Health"; "Mental Hygiene"; "War and Its Effects"; "Mental Health and Science"; "Comparative Mental Hygiene"; and "Mental Hygiene of the Normal."

The volume seems to be intended for the non-professional layman in that it is superficial and over-simplified. However, many chapters are exceptionally well done, particularly Chapter XI by Lloyd J. Thompson on "The Contributions of Mental Hygiene and the Future."

The Married Woman. By GLADYS H. GROVES and ROBERT A. ROSS. 278 pages. Cloth. World Publishing Co. Cleveland. 1951. Price $1.50.

Mrs. Groves is one of the pioneers of modern sex education, her collaborator is a gynecologist. The book first captivates by a reasonable attitude toward prejudices in sex: "No woman so badly bungles her marriage as she who tries to deny its sex basis" (p. 81). Objections arise when a long series of simplifications of neurotic mechanisms are encountered, e. g., constant stress of the possibility of self-help. The neurotic facts underlying frigidity are grossly underrated. Reading of the book is further complicated by a peculiar "stilted-fancy" language.

The Psychology of Flight. By ALEX VARNEY. 269 pages. Cloth. D. Van Nostrand Co. New York. 1950. Price $3.75.

This book is written for those whose primary interest lies in aviation, particularly persons who desire flight training licenses, pilots, in-training pilots, and others who make considerable use of air transportation. As the late General Arnold of the Air Forces commented, "The manuscript is intensely interesting, but I do not know whether it is psychology, or just common sense, or both."

This book deals with baffling problems of adjustment encountered by airplane pilots in rather unusual, dramatic situations, thus providing an opportunity to understand the factors influencing their behavior. The author feels an understanding of these unusual experiences which are never met in land or water transportation, can be readily applied to personal problems for a better understanding of ourselves.

The text is well written, exciting, and full of dynamic material.

Annual Review of Psychology. Vol. II, 1951. Calvin P. Stone and Donald W. Taylor, editors. 389 pages. Cloth. Annual Reviews, Inc. Stanford, Calif. 1951. Price $6.00.

In view of the tremendous amount of psychological data published yearly, it is most difficult to keep abreast of the journal literature. *The Annual Review of Psychology* offers a valuable service in examining and reviewing papers in about 18 fields of psychology. References are provided so that the original sources may be consulted.

The objective behind this publication is commendable. However, the value of the text might be enhanced if fewer fields were covered, with more space devoted to more detailed discussions of those remaining. Nevertheless, it is most useful in gaining a bird's-eye view of developments and trends during the past year.

The Witness. By JEAN BLOCH-MICHEL. 170 pages. Cloth. Pantheon. New York. 1949. Price $2.50.

Jean Bloch-Michel has written his first work of fiction, and he does well in the field. Told in the first person, the events unfold quickly yet unhurriedly throughout. The narrater saw his brother drown when the boat they were in sank, and he chose to swim to safety rather than stay and give help—help that was foredoomed to failure and would have resulted in the death of both. Tormented by a feeling of responsibility and guilt, more and more as time went on, he secluded himself from the world; despite the tumultuous events in France during the occupation, and despite his sweetheart, then wife. Here is insight into the thoughts and emotions of a person after he has given up all hope.

The Samoan Dance of Life. By JOHN COPP and FAAFOUINA I. PULA. Preface by Margaret Mead. 176 pages including index. Cloth. Beacon Press. Boston. 1950. Price $2.50.

Margaret Mead has written a short introduction to this novel which should be a warranty of its authenticity. It is the story of actual happenings cast in the form of a fictional autobiography of an intelligent Samoan boy. The clash of races in Samoa has been tempered by benevolent American and New Zealand administration to a clash of cultures. This is a record of the survival of ancient folkways, mores and sexual morality under the overlay of western Christianity—evangelical Protestantism, Mormonism and Roman Catholicism.

The Samoan co-author of the book supplied the material by question-and-answer method and reviewing of the work. It should become a small classic in the field of cultural conflict.

Their Mothers' Sons. Revised edition. By EDWARD A. STRECKER. 237 pages. Cloth. Lippincott. Philadelphia. 1951. Price $3.50.

Here is a revised edition of Dr. Strecker's famous vituperative classic on the occupational disorder, "Momism." He has added a chapter, "Out of Swaddling Clothes," dealing with Russia's particular variety of overprotection of children and its results in the adult. This reviewer is aware that Dr. Strecker's excellent book was greeted with acclaim, and promptly misused, by groups, all too willing to blame modern America's ills on their womenfolk. A sober re-reading by any whom this misogynistic (not to say worse) enthusiasm has misled might be indicated. The type of society and type of mother which Dr. Strecker deplores are no less common and no less menacing today than when he wrote originally in 1946 of "Mom-precipitated" neuroses.

The Drood Murder Case. By RICHARD M. BAKER. X and 195 pages. Cloth. University of California Press. Berkeley and Los Angeles. 1951. Price $3.00.

Charles Dickens wrote only one book that needed to be completed, and it, *The Mystery of Edwin Drood,* was left unfinished at the time of his death—unfinished and without any positive clues left as to the solution of the mystery. These five studies are another attempt to unravel some of the many problems that have arisen when reading the fragment Dickens left. The solutions given are logical and in many cases probable. There is a brief attempt to prove that Dickens identified himself with John Jasper, the "murderer," a statement which is highly controversial at best. Sufficient emphasis is not put upon this point, however, to detract from the work as a whole.

A Dark Stranger. By JULIAN GRACQ. 187 pages. Cloth. New Directions. Norfolk, Conn. 1950. Price $2.50.

Despite moments of interest and occasional passages of brilliance, on an over-all picture this novel must be counted a failure. How much of the failure can be ascribed to the translation and the poor typographical setting in dialogue is difficult to assay. Where a slow, mounting psychological suspense is required, the sequence becomes enmeshed in words instead, and the reader's train of thought is lost. The characters are not natural; but this in itself is not an indictment—the only reason it becomes obvious is that the atmosphere of suspense is broken.

Operation Heartbreak. By DUFF COOPER. 153 pages. Cloth. The Viking Press. New York. 1951. Price $2.50.

A book written in a highly romantic vein and avoiding any temptation to be "modern" would seem to be going against the times. In this gripping little story of a man who suffers frustration for lack of the chance to fight and die in the army, however, a notable success has been achieved. One of the men who were just too young to see active service in World War I, and just too old in the second, Willie Maryngton felt the frustrations of uselessness. His story and his final service add up to one of the most rewarding novels seen this year.

Epidemiology of Mental Disorder. Papers presented at a round table at the 1949 annual conference of the Milbank Memorial Fund. 198 pages. Paper. Milbank Memorial Fund. New York. 1950. Price 50 cents.

If this book contained nothing of value but the bibliography, which is certainly not true, it would still be worth the extremely modest purchase price. Epidemiology is taken to include roughly all work dealing with mass statistics, and the material is presented in the form of discussion of the separate classifications. As there is much here of value, this reviewer wishes an index had been included to facilitate use as a reference.

The Captain. By RUSSELL THACHER. 280 pages. Cloth. Macmillan. New York. 1951. Price $3.50.

This is an absorbing book. It is absorbing enough so that the reader's mind will be kept off its several weaknesses until he has finished it. There is little that is new in either the situations or the characters, and the succession of events that befall the captain of this LST fall too nicely into a pattern to be wholly credible. While there is an attempt to comprehend the motivations of the many and varied characters, one gets the impression that the author did not really know the men he was writing about, or only knew them from a surface level.

Personal Health and Community Hygiene. By HAROLD S. DIEHL, M. D., and RUTH E. BOYNTON, M. D. XII and 469 pages. Cloth. McGraw-Hill. New York. 1951. Price $4.50.

This revision of *Healthful Living for Nurses* has, as the title implies, been expanded to include more material dealing with the field of public health. It is designed as a text, with chapter bibliographies and "discussion suggestions." The section on mental health is very brief and in no way comprehensive, serving merely to correct some of the popular misapprehensions on the subject; but as a general nursing text the book is adequate.

Psychiatric Nursing Personnel. 32 pages. Paper. American Psychiatric Association. Washington, D. C. 1951. Price 60 cents.

This is a purely statistical survey of personnel policies, incidence, and other related facts concerning the psychiatric nursing personnel in all forms of mental institutions in this country. The figures, obtained through questionnaires, bring out, better than words could, the shortage of adequately trained help in this field.

Dreadful Sanctuary. By ERIC FRANK RUSSELL. 276 pages. Cloth. Fantasy Press. Reading, Pa. 1951. Price $2.75.

What starts out to be an at least moderately successful fantasy ends up by turning into another "hard-boiled"-school detective story, complete with many corpses, a private detective, and some last-minute heroics that serve to avoid a world-wide calamity. As long as the story is kept at the fantasy level the reader can drift along blissfully, but when the element of fantasy is lost, interest is likely to go right along with it. One could read into this story many social implications on human gullibility and greed, but this reviewer did not think the necessary effort was justified.

Mental Hospitals—1950. Winfred Overholser, M. D., editor. xvii and 214 pages. Paper. American Psychiatric Association. Washington, D. C. 1951. Price $2.50.

The proceedings of the Second Mental Hospital Institute held in St. Louis have been set forth here. The form used is that of a panel discussion after an opening statement. There has been a successful attempt to represent many different outlooks on the problems involved, and the reader will find his views broadened by a realization of the different ways in which similar problems have been and are being approached in different settings. More careful final proofreading and/or better type work would be advantageous, as there are many errors to be noted.

Body and Mature Behavior. By M. FELDENKRAIS. vii and 167 pages. Cloth. International Universities Press. New York. 1949. Price $3.75.

In giving a short, concise summary of existing information in the fields of physiology and neurology, Feldenkrais has done well. The author's own basic premise is that bodily function is so integrated with mind function as to make any treatment of one without cognizance of the other unfeasible. The bodily functions of emotions, which are just as real and demonstrable as the psychic, have been discussed. While not subscribing to the limiting ideas of Pavlov and other "conditioned reflex" researchers, the author doubts the existence of an unconscious and believes that motor patterns can explain the greater part of the functions ascribed to it. The arguments have been presented logically and clearly—the impression one gets on reading this book is of the impossibility of anything but hypotheses regarding solutions until vast amounts of research are done. At this point the major emphasis in correlating physiology and psychiatry must be placed on research and not on theory, a point of view fully endorsed in this book.

Dark Lady. By GERDA ROBISON. 247 pages. Cloth. Harper. New York. 1951. Price $3.00.

Gerda Robison presents a suspenseful tale complete with the vanishing of one man, the mysterious behavior of several others, a man using a pseudonym in an effort to trace his brother to a small southern town, and a grandiose, paranoid father who is also a tyrant—to put it mildly. The result is an absorbing account of the lives of the persons who are directly or indirectly involved in the disappearance of Tony Fitzgerald, a young medical school graduate who had fallen in love with the tyrant's daughter.

Five years after his disappearance Tony's brother arrives on the scene to learn the circumstances. The events leading to the eventual solution of the mystery make good reading, are psychologically plausible, and "well calculated to keep you in suspense."

The Shadow and the Peak. By RICHARD MASON. 298 pages. Cloth. Macmillan. New York. 1950. Price $3.00.

In a desire to escape from the memories of an unhappy marriage, Douglas Lockwood accepts a position in a progressive school in Jamaica. While there he encounters frustration after frustration, both in his professional and in his personal life, culminating in his forced departure. The characters ring true, though, for dramatic emphasis, they tend to be somewhat exaggerated. There is a tendency throughout to make situations appear too clear-cut and to make characters too standardized, but this detracts little from reading enjoyment.

Shadow of the Bridge. By BETSEY BARTON. 279 pages. Cloth. Duell, Sloan and Pearce. New York. 1950. Price $3.00.

This author's latest is not a profound book but it presents material that novelists might more frequently explore—the constant struggle of youth to find a satisfactory existence and philosophy in a world whose standards are too often fixed and inexplicable to young idealists.

It is the suicide of her best friend at the termination of an unsatisfactory love affair that finally enables school-girl Alida Grant to see and evaluate for herself certain basic ethics.

One looks forward to the time when Miss Barton's literary style will equal her choice of theme and situation.

Freedom and Culture. Compiled by UNESCO. 270 pages. Cloth. Columbia University Press. New York. 1951. Price $3.75.

With the exception of the article by German Arciniegas, "Culture—A Human Right," which has a free-flowing readability all its own, these pieces provide neither depth of insight nor general appeal sufficient to make this book truly valuable. While the value of having well-known men study culture in its various phases must be conceded, the end-result, taken as a whole, is disappointing. There are many valuable observations to be found here, and entire sections that are fascinating. But score this book a miss—but not such a miss as to in any way discourage future efforts, which are to be highly recommended.

The Innocence of Pastor Müller. By CARLO BEUF. 156 pages. Cloth. Duell, Sloan & Pearce. New York. 1951. Price $2.50.

When a professional photographer developed a way of taking a picture that would show in it the inner thoughts of the person photographed, the effect on Germany's foreign relations was marked. This same invention was the downfall of its creator, however, because it led him to distrust his wife and finally kill both himself and his wife's supposed lover. It seems to be the belief of both author and publisher that this book has its chief value in the parable it makes of a modern inquisitive society. To this reviewer, the book was a delightful little story and the ending simply a way to bring the events to a conclusion. The moral was found to be secondary.

Psychological Warfare. By SAUL K. PADOVER and HAROLD D. LASSWELL. 62 pages. Paper. Foreign Policy Association. New York. 1951. Price 35 cents.

This is number 86 in the Headline Series of pamphlets put out by the Foreign Policy Association. While the explanations of the goals and techniques of psychological warfare are neither new nor startling, the articles are well written and interesting and help to clarify a subject that is too often shrouded in mystery.

Ritual in Family Living. By JAMES H. S. BOSSARD and ELEANOR S. BOLL. 228 pages. Cloth. University of Pennsylvania Press. Philadelphia. 1950. Price $3.50.

In using the term ritual to include all family activities that are set and unchangeable, and that, if changed, would carry a sense of "not-rightness," the authors have succeeded in conveying a far clearer concept of its importance than could possibly be done while it was thought to encompass only religious connotations. The amount of new material and ideas presented is not too large, and could safely have been condensed to article size—especially since the case studies presented add little to the general appreciation of the book. The facts and ideas presented here are valuable, and it is safe to guess that they will be made use of by other writers; but only a person highly interested in the subject will find this book important to his library.

Strategy in Poker, Business and War. By JOHN MCDONALD. 128 pages. Cloth. Norton. New York. 1951. Price $2.50.

The realm of pure strategy is best illustrated by, and probably exists only in, games. When applying the theories of games to business and war many interesting parallels may be made. The three basic principles of game strategy are: chance moves, to prevent any pattern of strategy being discovered; "minimax," or striving for an optimum gain on the assumption that one's strategy may be found out; coalitions. Thus, in a game, and in many world situations as well, good strategy would dictate many maneuverings having no significance—these being not merely planned decoys but being as nearly chance choices as possible. This book is a popular presentation in a highly readable form of many of the theories brought forward by von Neumann and Morgenstern. The sketches by R. Osborn are enlivening, though not always especially appropriate to the text.

An Outline of Scientific Criminology. By NIGEL MORLAND. 287 pages including index, appendices and space for notes. Cloth. Philosophical Library. New York. 1950. Price $4.75.

Nigel Morland presents here a short outline covering the principal problems of criminology from the popular and enforcement rather than the psychiatric and sociologic points of view. The book is based largely on British practice but a great deal of its material is derived from France and America. The psychiatrist will find in it most of the general information he is likely to require besides adequate, if short, reviews of medical jurisprudence and forensic chemistry. There are excellent bibliographies divided by sub-topic. The medical practitioner should find this a valuable basic work for orientation purposes.

The Bender-Gestalt Test. By GERALD R. PASCAL and BARBARA J. SUTTELL. 274 pages. Cloth. Grune & Stratton. New York. 1951. Price $6.50.

Pascal and Suttell have presented, in this work, an objective scoring device for the Bender Visual Motor Gestalt Test. The method proposed is exhaustively illustrated with the scorable deviations in test performance. Practice records for scoring are also given as well as the tables for the conversion of the raw score into the Z score.

It is to the authors' credit that the inherent limitations of any such device are well recognized; and their method is presented in a factual manner with a minimum of speculation and generalization. The book is of value to the clinical psychologist; and, although it is hoped that there will be refinement regarding diagnostic categories, nevertheless, it lends an objective element to a test that has always been surrounded by subjectivity.

Easy Does It. By HUGH REILLY. 277 pages. P. J. Kenedy & Sons. New York. 1950. Price $3.00.

To many Americans, it would come as a shock to realize that we have 3,000,000 alcoholics in the United States and that "one drunk is standard equipment for every American family." (See studies made by the late Raymond Pearl of Johns Hopkins University.)

What many do not understand is that alcoholism is a disease as are diabetes and tuberculosis, and is deadly, not merely to the victim himself, but to the affections of those for whom he cares most.

Easy Does It or "The Story of Mac" tells of one man's escape from the grip of alcohol through the work of a padre with insight and the practice of the 12 steps offered by that famous organization Alcoholics Anonymous. These re-build the whole man . . . physically, mentally and spiritually.

Readers can overlook the book's occasional sentimentality for its obvious value to the problem drinker or his family.

Journey Into the Self: Being the Letters, Papers and Journals of Leo Stein. xiv and 331 pages. Cloth. Crown Publishers. New York. 1950. Price $4.00.

To a person who is familiar with the people associated with the modern art and literature movements of this century, this book will prove fascinating reading and provide invaluable background material. Because of the lack of editorial comments and the consequent difficulty in placing these papers in perspective with a general movement, its value to people not having this background will be limited. While the neuroses that formed such an integral part of Leo Stein's life come in for a great deal of attention, there is not sufficient exact information to be of interest to people connected with psychiatry.

History of the Second World War. Problems of Social Policy. By RICHARD M. TITMUSS. xi and 596 pages. Cloth. H. M. Stationery Office and Longmans, Green and Company. London. 1950. Price $5.75.

The British government, in planning a civil history of the second World War, entrusted the volume on social policy to R. M. Titmuss. The main topics covered are: the evacuation of mothers and children, the hospital services, and the effects upon the people of air attacks. One of the great surprises of the war was the lack of severe emotional unbalancing caused by air raids and similar traumata. There was no sudden upsurge of neuroses, and there was even, in some fields such as suicides, a decline. Panic was slight, and the governmental protective devices, such as deep shelters and evacuation, were never used to capacity. They did, however, meet a real emotional need of the people, simply by their existence. They were there if needed. This book is primarily useful as a reference and source book, but this does not imply that there is little to be gained by reading it in its entirety.

Ambrose Bierce: The Devil's Lexicographer. By PAUL FATOUT. xv and 349 pages. Cloth. University of Oklahoma Press. Norman. 1951. Price $4.00.

There was no possibility of having a neutral feeling toward Ambrose Bierce: You either liked him or you didn't like him, and usually violently. This fine biography has very clearly made apparent many of the basic trends in the man's life, succeeding remarkably well in view of the fact that so much vital information has been completely lost. The terrific suspicion of people, all people, and families in particular, is traced back to a childhood lacking in normal parental affection and to an unsuccessful marriage, while the stern religious upbringing inspired a feeling of revolt, a revolt that was always largely intellectual and could never permeate the emotions.

This Is the Hour. By LION FEUCHTWANGER. 516 pages. Cloth. The Viking Press. New York. 1951. Price $3.95.

In this book, sometimes resembling a panorama more than a novel, Goya and the Spain he lived in come to life. The political intrigues of the time and Goya's individual paintings call for much attention, as do his tempestuous relations with the Duchess of Alba. This reviewer does not feel the picture drawn of Goya's personal character to be justified. A degree of near-apathy is given him that does not fit with known facts, at least not in the period covered in this novel. His psychosis is suggested to be of syphilitic origin, which is contrary to recent opinion.

Journey for Our Time. By the MARQUIS DE CUSTINE. vii and 338 pages. Cloth. Pellegrini & Cudahy. New York. 1951. Price $4.00.

In bringing out a new abridged edition of the *Russian Journal* of the Marquis de Custine, implications have been made that this reviewer cannot accept. A "prophetic book" a "revealing picture of Russia—past, present . . . and future." There can be no denying the striking similarities shown between the Russia of Custine and the Russia of today, but, there has been no documentation as to the accuracy of Custine. This book must remain a popular account—to be accepted as what it is, one man's appraisal and report on the political institutions of Russia—in 1839. As a sidelight, it would be interesting to see how many of the readers of this book could read Mrs. Trollope's *Domestic Manners of Americans,* written at about the same time, without blushing at one point or another.

Handbook of Experimental Psychology. S. S. Stevens, editor. 1436 pages. Cloth. John Wiley & Sons. New York. 1951. Price $15.00.

This handbook, "designed to fill the gap that exists between elementary textbooks and the specialized journals," is an extremely exhaustive and comprehensive volume, with contributions by many of the outstanding psychologists of the day. The mass of material accumulated by experimental psychology has long needed sorting—which this work adequately does. It is expected that as an advanced text or reference book it will become an accepted classic of the field.

Selected Writings of Sir William Osler. xx and 278 pages. Cloth. Oxford University Press. New York. 1951. Price $4.00.

It is difficult to say what distinguishes Osler above others—perhaps it is the fact that while being a physician he remained so pre-eminately a human being. These writings, collected to celebrate the passing of the centenary of his birth, illustrate that same quality. Dealing largely with medical history, they cannot be said to be distinguished for research, or even for meticulous accuracy, but more for a deep interest. The reader feels that Osler *likes* the subjects and men he is writing about.

How to Help Your Child Develop Successfully. By B. VON HALLER GILMER. 368 pages. Cloth. Prentice-Hall. New York. 1951. Price $3.95.

This is a very practical handbook designed for parents. The first section deals with common problems. The second gives a résumé of typical behavior at different levels from birth to 10 years. The last third provides for a simplified developmental record. Dr. von Haller Gilmer has prepared a book which seems highly practical in its field.

Simple Simon Speaks his Mind. By LANGSTON HUGHES. 231 pages. Cloth. Simon and Schuster. New York. 1950. Price $3.00.

The honest white man will admit that he deserves a "worm's-eye" view through Negro eyes. And he gets it here with the punch that only the Langston Hughes pen can deliver. Yet this commentary of Simple Simon is pungent rather than bitter. Like the Negro spirituals, it is basically mournful; like them too, it is challenging.

Through these conversations with a friend we get Simon's reactions to woman trouble, the last war, the job problem and other bits of life that everybody faces.

To pick and choose among the sketches is a problem of individual taste; but this reviewer favors, "Something to Lean on"; "A Veteran Falls"; "Blue Evening"; and a vignette à la Helen Hokinson, "Banquet in Honor."

All cry out for quotation. Here is one from "The Last Whipping." Says Simon, "It wasn't the whipping that taught me what I needed to know. It was because she cried. When people care for you and cry for you they can straighten out your soul."

H. G. Wells. By VINCENT BROME. 255 pages. Cloth. Longmans, Green. New York. 1951. Price $3.75.

In presenting an interesting, readable biography and in making a somewhat unbelievable figure come alive Vincent Brome has done well. The restless, energetic, driving person who was never an English "gentleman," who thought and reacted like the middle class environment which he represented, seems very real after reading this book. Wells, the out-spoken partisan of "free love," was the first to offer marriage as soon as his situation made it possible—his background was too strong. But anyone reading this book in the hope of finding an investigation of Wells' inner drives and psychology will find himself disappointed. About the deepest that the author allows himself to go is to take issue, but very mildly, with Wells' own loud claims that he was totally lacking an Oedipus complex, and, as regards his tempestuous love life, the author at times seems more embarrassed by it than Wells ever was.

Debby. By MAX STEELE. 304 pages. Cloth. Harper. New York. 1950. Price $3.00.

This is a well-written book of popular appeal. Debby is of low mentality, and becomes the "ideal" companion for young children because she reacts much as they do. As the children grow older, they lost interest and draw away from her. With her growing loneliness comes increasing escape in fantasy and rather morbid fears.

CONTRIBUTORS TO THIS ISSUE

NOLAN D. C. LEWIS, M. D. Dr. Lewis is director of the New York State Psychiatric Institute, professor and chief executive of the department of psychiatry, Columbia University, and lecturer in psychiatry at the New York School of Social Work. A graduate in medicine of the University of Maryland in 1914, he studied later at Johns Hopkins and the University of Vienna. Before coming to the New York State hospital system, Dr. Lewis served in Maryland state hospitals and at St. Elizabeths Hospital in Washington. He is editor of the *Yearbook in Psychiatry*, managing editor of the *Journal of Nervous and Mental Disease, The Psychoanalytic Review*, and the *Nervous and Mental Disease Monograph* series. He is a contributing editor to *Sociometry* and the *Journal of Psychosomatic Relationships.*

M. MARTIN TUNIS, M. D. C. M. Dr. Tunis, born in Montreal in 1921, is a graduate of the Sir George Williams College and of McGill University, from which he received his medical degree in 1947. His clinical training has included two years in the Diploma Course in Internal Medicine at the Royal Victoria Hospital. He was appointed Commonwealth Fellow in Medicine at the Cornell Medical Center, New York Hospital on July 1, 1950.

HERBERT DÖRKEN, Ph.D. Dr. Dörken has been psychologist in charge at Verdun Protestant Hospital since May 1948. Born in 1925, he received his M. Sc. degree from McGill University in 1947. He interned in psychology at Ste. Anne's Hospital, Quebec (D. V. A.). He is a member of the American Psychological Association, the Rorschach Institute, American Association for the Advancement of Science and other professional groups. He is the author of a number of scientific articles.

LESTER DRUBIN, M. D. Born in Brooklyn in 1914, Dr. Drubin is a graduate of Columbia and of the Long Island College of Medicine, from which he received his doctor's degree in 1937. He has been with the Veterans Administration since 1940, was chief of the acute intensive treatment service at the Veterans Hospital, Northport, N. Y., from 1947 to 1948 and has been chief of continuous treatment service since that time. He is a diplomate of the American Board of Psychiatry and Neurology and is an associate in psychiatry at the Long Island College of Medicine.

LOUIS F. VERDEL, M. D. Born in Memphis in 1894, Dr. Verdel was graduated in medicine from the National University of Arts and Science, St. Louis, in 1915. He served as a first lieutenant in the United States Army Medical Corps in World War I and as a colonel in World War II, receiving the Legion of Merit award. He was formerly manager of the Veterans Hospital, Roanoke, Va., and has been manager since 1944 of the Northport (N. Y.) Veterans Administration Hospital. He is a lecturer in psychiatry at the Long Island College of Medicine.

MARVIN J. FELDMAN, Ph.D. Dr. Feldman, born in St. Paul, Minn., in 1922, received his M. A. degree in 1945 from the University of Minnesota, and his Ph.D. degree in 1949 from the University of California. He was a research fellow of the United States Public Health Service at Langley Porter Clinic in San Francisco from 1947 to 1948. Since 1948 he has been assistant professor of clinical psychology at the University of Buffalo.

JAMES DRASGOW, M. A. Mr. Drasgow was born in Buffalo in 1924. He received his M. A. degree in January 1950 from the University of Buffalo and is at present graduate research assistant in the department of psychology at the University of Buffalo.

ERNEST GOSLINE, M. D. Dr. Gosline was born in Dallas, Texas, in 1924. He is a graduate of Cornell University and received his medical degree at Cornell in 1947. After an internship in Brooklyn Methodist Hospital, he became psychiatric resident at Utica (N. Y.) State Hospital and later senior psychiatrist. He was director of the group therapy program at Utica from September 1949 to October 1950. He has been on active duty with the navy since that time, serving as neuropsychiatrist at the United States Army Hospital, Camp Pickett, Va., and on the neuropsychiatric service of the United States Naval Hospital, Portsmouth, Va.

JACKSON H. FRIEDLANDER, M. D. Dr. Friedlander, a graduate of the Long Island College of Medicine in 1934, is chief of medicine at the Northport (N. Y.) Veterans Administration Hospital and executive secretary of the research laboratory of the Northport Hospital. He is a diplomate of the American Board of Internal Medicine and an associate of the American College of Physicians. He served in World War II as chief of cardiovascular diseases with the 79th General Hospital, the affiliate unit of the Long Island College of Medicine.

B. E. PHILLIPS, Ph.D. Dr. Phillips has for five years served as chief, adapted sports division, recreation service, Office of Special Services, Veterans Administration, Washington, D. C. He is a part-time, professorial lecturer in physical education at George Washington University, and is a member of the board of associate editors of the *Research Quarterly* of the American Association for Health, Physical Education and Recreation. He recently returned from a three months assignment in Germany as a specialist in community recreation and sports for the United States Department of State.

MAUREEN McSORLEY. Miss McSorley is a graduate of the Savage School for Physical Education. She formerly taught health education and physical education in the elementary and junior high schools of New York City and served as recreationist in board of education and park department playgrounds. She entered New York State service at Rockland State Hospital in 1944.

EUGENE DAVIDOFF, M. D. Dr. Davidoff is chief psychiatrist of Ellis Hospital, Schenectady, N. Y. Born in 1901 in New York City, he is a graduate of Columbia College and received his medical degree from the University of Iowa in 1927. He interned at Kings County Hospital and then joined the New York State service at Manhattan State Hospital. He was clinical director of Craig Colony in 1943 when he left for army service, becoming a lieutenant-colonel in the medical corps. He was later chief neuropsychiatrist for the Veterans Administration at Watervliet, N. Y. and has been assistant director and acting director of the New York Veterans Administration branch office. Dr. Davidoff is author or co-author of more than 70 scientific articles, many of them published in this QUARTERLY. He is a fellow of the American Psychiatric Association and the American Medical Association, and is a member of a number of other professional societies. He is a diplomate in psychiatry of the American Board of Psychiatry and Neurology and is assistant professor of psychiatry at the Albany Medical School.

FRANCIS J. O'NEILL, M. D.

FRANCIS J. O'NEILL, M. D.

Francis J. O'Neill, M. D., director of Utica State Hospital, was named senior director of Central Islip State Hospital by New York State Commissioner of Mental Hygiene Newton Bigelow, M. D., on August 1, 1951. Dr. O'Neill had been director of Utica State Hospital since April 1949.

He was born at St. Albans, Vt., November 14, 1907, was educated at the parochial and public schools of St. Albans, received his B. S. degree from the University of Vermont in 1929 and his medical degree from the University of Vermont College of Medicine in 1932. He interned at the Station Hospital, Fort Sam Houston, Texas (U. S. Army), in 1932 and 1933 and was in the private practice of medicine in Burlington, Vt., in 1933.

Dr. O'Neill was appointed medical intern at Central Islip State Hospital, December 1, 1933, promoted to assistant physician on March 1, 1935, and to senior assistant physician, December 5, 1938. He was appointed pathologist at Binghamton State Hospital, May 1, 1940. He entered the navy as a lieutenant, December 26, 1941; served as lieutenant, lieutenant-commander and commander. He was attached to U. S. Naval Mobile Hospital No. 3. Later he was attached to the U. S. Marine Corps, Southwest Pacific, until 1943 as pathologist and chief of psychiatric service. He was at the U. S. Naval Hospital, Shoemaker, Calif., August 1943 to December 1, 1945, as chief of laboratory service.

Discharged from the navy in 1946, Dr. O'Neill returned to Binghamton as director of clinical laboratories and transferred to Central Islip State Hospital as assistant director (administrative), September 1, 1946. He was appointed director of Utica State Hospital on April 1, 1949. He is married to the former Margaret Mary Boyce of Bellmore, N. Y., and there are four children—Nancy, Richard, Carolyn and Constance.

Dr. O'Neill is a fellow of the American Medical Association, a fellow of the American Society of Clinical Pathologists, a member of the American Psychiatric Association, a diplomate of the American Board of Medical Examiners, and a diplomate of the American Board of Psychiatry and Neurology. He is a commander in the U. S. Naval Reserve.

RICHARD V. FOSTER, M. D.

Richard V. Foster, M. D., associate director of Central Islip State Hospital, was appointed director of Gowanda State Homeopathic Hospital on July 1, 1951 by New York State Commissioner of Mental Hygiene Newton Bigelow, M. D. Dr. Foster, born in New York City in 1904, attended Columbia College and the College of Physicians and Surgeons of Columbia University on scholarships awarded following his graduation from high school. He received his medical degree in 1930, interned at Grasslands Hospital, Valhalla, N. Y., and joined the staff of Rockland State Hospital on January 1, 1932. He was transferred to Pilgrim State Hospital in 1938 and was administrative assistant there when he was promoted to associate director at Central Islip.

Dr. Foster is a diplomate of the American Board of Medical Examiners and holds certificates in both psychiatry and neurology from the American Board of Psychiatry and Neurology. He is a member of the American Psychiatric Association and of other professional societies. His non-professional activities include interest in the Boy Scouts, and he has been a member of the Suffolk County Council of the Boy Scouts for several years. He also served recently on a special planning commission for the Bay Shore (N. Y.) High School. He served during World War II and up to the present time as examining neuropsychiatrist at the New York City Army Recruiting and Induction Center. Dr. Foster was married to Ruth Virginia McMullen of Whitestone, N. Y., in 1931. They have two sons, Richard, 16, and Neal, 14.

RICHARD V. FOSTER, M. D.

CHRISTOPHER F. TERRENCE, M. D.

CHRISTOPHER F. TERRENCE, M. D.

Christopher F. Terrence, M. D., assistant director of Brooklyn State Hospital since 1943, was named director of Rochester State Hospital on July 1, 1951 by New York State Commissioner of Mental Hygiene Newton Bigelow, M. D.

Dr. Terrence was born in Brooklyn in 1906 of a family which had lived there for four generations. He attended elementary and high school in Brooklyn, was graduated from St. Francis College, and was graduated from the Long Island College of Medicine in 1931. He interned at Kings County Hospital and entered the state service in 1933. He had been assistant director at Brooklyn since 1943. Dr. Terrence has taught at the Graduate School of Psychology at Fordham University and for eight years was on the teaching staff of the Long Island College of Medicine. He is a diplomate of the American Board of Psychiatry and Neurology, is president of the New York Society for Clinical Psychiatry, is a fellow of the American Psychiatric Association and a member of other professional organizations. Dr. Terrence has devoted a good deal of time to the physical therapies, particularly in dementia præcox. He was one of the early users of insulin shock therapy and metrazol and has taken active part in the neurosurgical treatment of mental illness. He has personally assisted at more than 300 lobotomy operations.

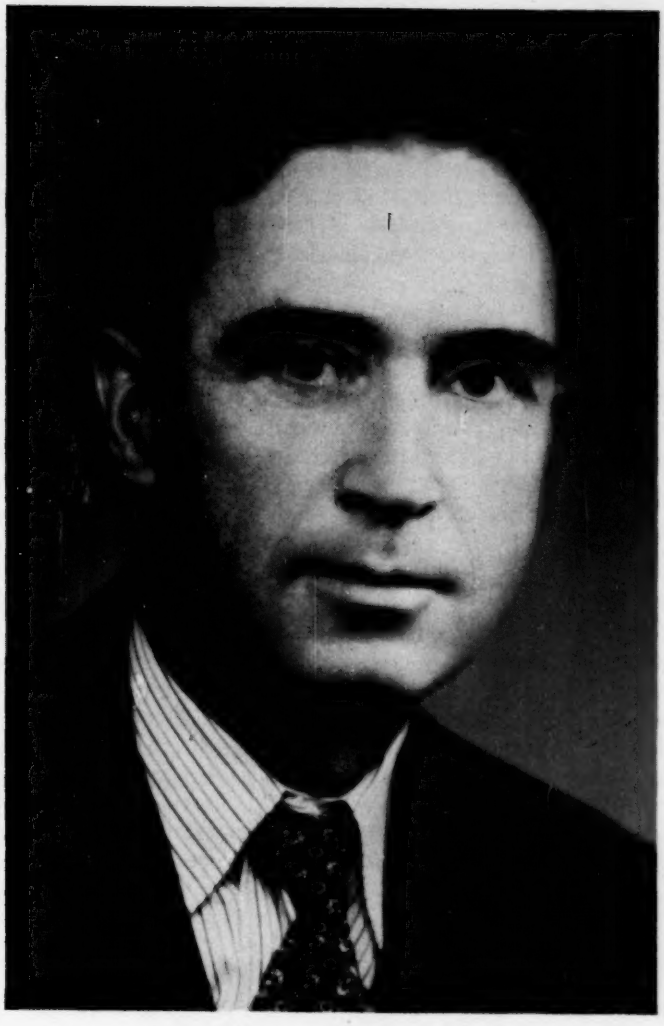
Dr. Terrence plays golf, bowls and occasionally plays tennis. He is actively interested in all sports. Having four sons, he notes that such interest is at times something of a necessity.

BASCOM B. YOUNG, M. D.

Bascom B. Young, M. D., assistant commissioner of the New York State Department of Mental Hygiene, was named director of Utica State Hospital on August 1, 1951 by Commissioner of Mental Hygiene Newton Bigelow, M. D. Dr. Young has been in state service since 1930 when he joined the staff of Harlem Valley State Hospital as assistant physician. He was assistant director of that institution when he served as acting medical inspector in 1944 and 1945, and later worked on a special survey of ward personnel for the Department of Mental Hygiene. He was appointed assistant commissioner in 1950.

Dr. Young is a graduate of the College of William and Mary and a graduate in medicine of the University of Virginia in 1929. He is a member of the Dutchess County Medical Society, the American Medical Association, the American Psychiatric Association and the American College of Physicians and Surgeons. He is a diplomate of the American Board of Medical Examiners and of the American Board of Psychiatry and Neurology.

Dr. Young is married to the former Esther Marion Thomas. They have one daughter, Betty.



BASCOM B. YOUNG, M. D.

NEWS AND COMMENT

DR. CORCORAN RETIRES AFTER 44 YEARS

David Corcoran, M. D., head of Central Islip (N. Y.) State Hospital since 1933, has retired as senior director after 44 years in the state mental hospital service, which he entered at Central Islip in 1907. He was succeeded at Central Islip by Francis J. O'Neill, M. D., who had been director of Utica State Hospital. A note on Dr. O'Neill's appointment, which was effective August 1, 1951, will be found elsewhere in this issue of the SUPPLEMENT.

Dr. Corcoran, following early service at Central Islip, had been clinical director at Brooklyn State Hospital and first assistant physician at Creedmoor before his appointment to head Central Islip. Dr. Corcoran was honored at his retirement at a testimonial dinner attended by some 300 persons, including state and local officials. Mrs. Dorothy McLaughlin, director of the Central Islip School of Nursing, was chairman and toastmistress. A silver bowl was presented to Dr. Corcoran by the hospital board of visitors, and a traveling bag was presented as a gift of the hospital employees.

MINNESOTA GIVES CHILD PSYCHIATRY COURSE

The University of Minnesota has announced a continuation course in child psychiatry for general physicians and pediatricians from November 26 to December 1, 1951, with Dr. Reginald S. Lourie, director of the department of psychiatry, Children's Hospital, Washington, D. C., and Dr. J. Franklin Robinson, director of the Children's Service Center of Wyoming Valley, Wilkes-Barre, Pa., as visiting faculty members. Dr. Reynold A. Jensen, associate professor, departments of psychiatry and pediatrics of the University of Minnesota, is chairman for the course.

CLINICAL PASTORAL TRAINING CONFERENCE

The 1951 National Conference on Clinical Pastoral Training, sponsored by the Institute of Pastoral Care and the Council for Clinical Training, Inc., is being conducted Thursday and Friday, October 11 and 12, at Boston University School of Theology, with emphasis on counseling and mental hygiene problems. The Thursday sessions are professional, those on Friday open to all who are interested.

MENTAL HYGIENE EXHIBIT AT STATE FAIR

The New York State Department of Mental Hygiene's exhibit at this year's New York State Fair at Syracuse, September 1 to 8, was featured by a Blondie-and-family puppet show, the distribution of "Blondie" bookmarks, and the publicizing of the department's new doughnut, a contribution to the improved nutrition of the state's mental patients. Blondie, Dagwood and their family were presented in 12-minute puppet shows illustrative of mental hygiene principles, by special permission of Chic Young, the cartoonist, and King Features. The animated cartoons shown last year were repeated this year, and the Blondie and Dagwood comic books distributed last year were available again. Samples of the new doughnuts were distributed to visitors to the department's exhibit, along with recipes for quantity and family-size preparation. The new doughnut formula, which follows last year's introduction of an improved bread formula for the department bakeries, produces a high protein, low fat, doughnut batter, fortified with natural vitamins and minerals.

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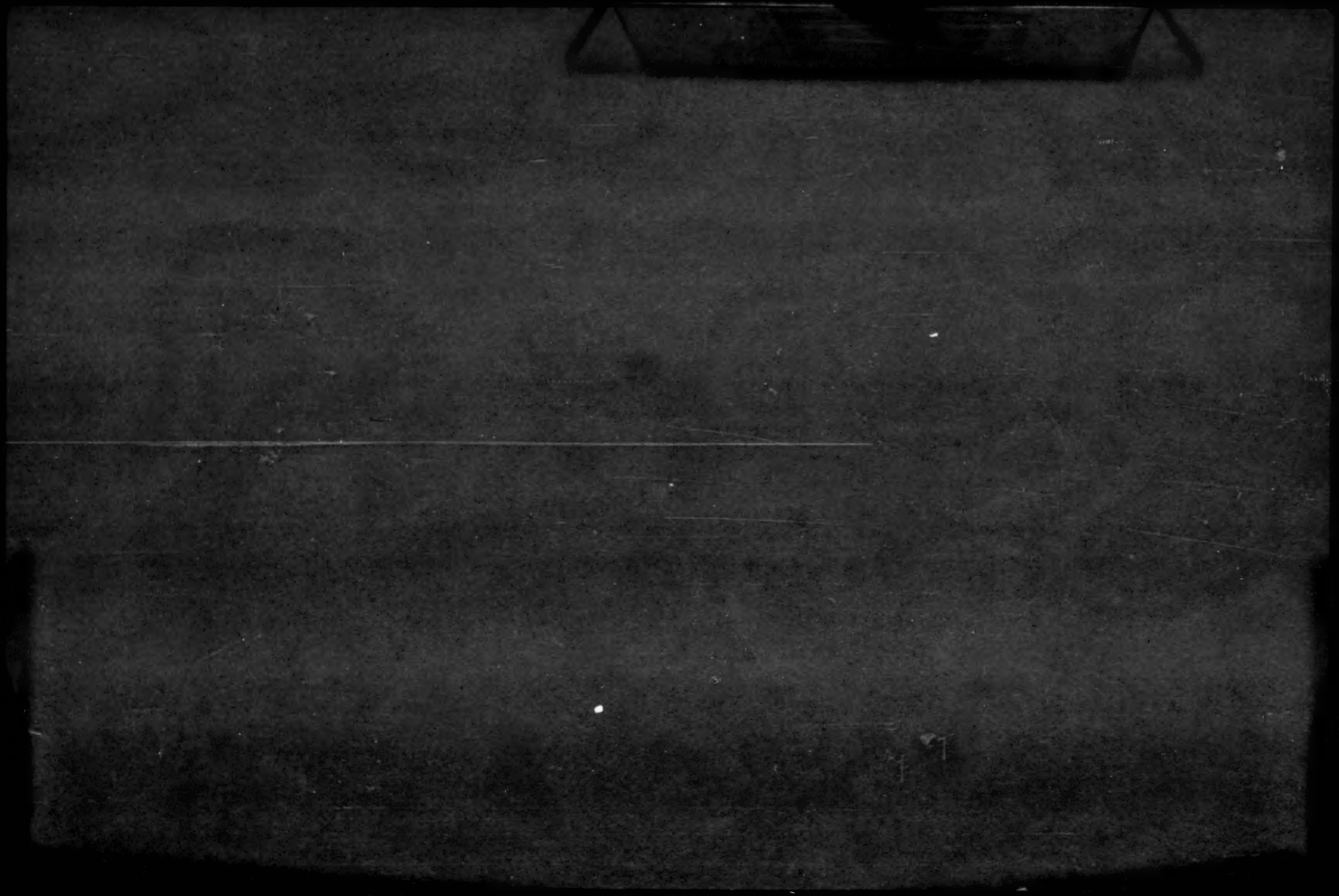
MENTAL HYGIENE DEPARTMENT POSITIONS FILLED

Harold Abel, recreation instructor for the past 12 years at Pilgrim State Hospital, Brentwood, N. Y., was named supervisor of recreation for the New York State Department of Mental Hygiene, by Commissioner of Mental Hygiene Newton Bigelow, M. D., on September 1. Commissioner Bigelow appointed Joseph M. Goeway to the new position of safety consultant for the department, effective the same date. Mr. Abel will serve as adviser to recreation personnel at the department's 27 institutions, and will assist in general expansion of the department's recreation program. Mr. Goeway, acting supervisor of the upstate safety division of the State Insurance Fund for the last 15 years, will be responsible for developing an advisory service in all matters of institution safety.



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